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TEACHER EXCELLENCE: RECRUITMENT AND TRAINING

HEARINGS

BEFORE THE

COMMITTEE ON LABOR AND HUMAN RESOURCES

AND THE

SUBCOMMITTEE ON EDUCATION, ARTS AND HUMANITIES

OF THE

UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

SECOND SESSION

ON

S. 1675

TO PROVIDE FINANCIAL ASSISTANCE FOR TEACHER RECRUITMENT AND TRAINING, AND FOR OTHER PURPOSES

AND

S. 1676

TO STRENGTHEN THE TEACHING PROFESSION, AND FOR OTHER PURPOSES

JANUARY 30, FEBRUARY 22 AND MARCH 2, WASHINGTON, DC
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TEACHER EXCELLENCE: RECRUITMENT AND TRAINING

TUESDAY, JANUARY 30, 1990

U.S. Senate,
Committee on Labor and Human Resources,
Washington, DC.

The committee met, pursuant to notice, at 9:24 a.m., in room SD-430, Dirksen Senate Office Building, Senator Edward M. Kennedy (chairman of the committee) presiding.

Present: Senators Kennedy, Pell, Simon, Hatch, and Cochran.

Also Present: Senator Rockefeller.

Opening Statement of Senator Kennedy

The Chairman. We'll come to order.

This morning, we continue our series of hearings on education, with special emphasis on the challenges facing the teaching profession.

We all agree on the importance of education as an investment in the future of America, but many of us in Congress feel that the Federal Government is not doing enough to match our deeds with our words.

In his budget released yesterday, President Bush proposed to increase education spending from $24.1 billion to $24.6 billion. He has put forward some worthwhile increases, and I commend the additional funding for Chapter 1 and for math and science.

But on the whole, it is a disappointing education budget. For the tenth year in a row, the Reagan-Bush administrations have proposed to cut education spending below the level necessary to keep up with the previous year's inflation. In any meaningful sense, this budget does less for education, not more. It's not a credible budget for a President who wants to be the "Education President."

The administration's failure to fund education adequately is especially notable in light of the dramatic events in Eastern Europe. We have won the Cold War. We have not won the war on ignorance and illiteracy. The truth is we are losing the war badly, and we will continue to lose it unless we get our priorities in order.

As the Economic Policy Institute will testify this morning, the United States spends less on elementary and secondary education than 13 of 16 industrialized countries across the globe. This is a national disgrace. Is it any wonder our students' test scores are below those of other countries, or that we are losing our competitive edge in the world marketplace?

According to the Institute, in order for us just to catch up to the level of the average expenditures of the 16 nations studied, we would need to increase our total Federal, State, and local spending on elementary and secondary education by 13 percent, or $20 billion. That would be just to become "average."

Any discussion of improving the quality of education begins with teachers. They are the fundamental building blocks of education. Without qualified, motivated, and caring teachers in the classroom, all our other "education reforms" will be harder to achieve.

Successful models at the Federal and local level provide guidance in this task. The Teacher Corps Program of the 1960's has produced some of the most talented teachers in our communities today. Two of them are joining us this morning.

At the local level, Pittsburgh's "Center of Excellence" program has resulted in a ten percent rise in student achievement after just a single semester. We have the knowledge to create successful programs like this in every community. What it takes is effective leadership at every level to get the job done.

Senator Pell and I have introduced three measures in this area—the "Excellence in Teaching Act," S. 1675; the "National Teacher Act of 1989," S. 1676; and the "Teacher's Professional Development Act," S. 498.

The key provisions of these bills would address the teacher shortage through a revitalized Teacher Corps Program providing scholarships to college and graduate students who agree to teach for 5 years after graduation.

We put special emphasis on training teachers in areas of urgent need, such as math, science, bilingual education, special education, and early childhood education.

We encourage minority recruitment through teaching magnet schools, residential summer institutes for disadvantaged high school students, education programs at historically black colleges and universities, and improved coordination between two- and four-year institutions.

We also provide in-service training through professional development academies, and we offer a range of incentives for teachers to continue in the profession.

Our goal is to develop a comprehensive approach which we hope the committee will recommend to the full Senate this spring. This is the year for Congress and the administration to live up to our commitment to give education the long overdue priority it deserves.

We have the charts here which I expect Dr. Mishel might refer to, and we'll let him refer to them.

We're delighted to have the first panel that consists of two distinguished guests: Al Shanker, the president of the American Federation of Teachers, a familiar friend of the committee; Larry Mishel, research director of the Economic Policy Institute, who is the author of "Shortchanging Education," the new report which shows that the U.S. spends less than almost every other nation surveyed on elementary and secondary education. Dr. Mishel is accompanied by his co-author, Dr. Edith Rasell.

We're delighted to have all of you, and we'll ask Senator Hatch for whatever comments he'd like to make.

Senator HATCH. Thank you, Mr. Chairman. I'm delighted to be here, and I appreciate you holding these hearings today.

I'm sure that each of us can remember a time that a teacher influenced our lives for the better. We can remember those special teachers in our lives. In our early years, teachers helped each one of us to form our early views about life and about the importance of learning. I think it's essential that we work together in Congress to assure our children and our grandchildren the same exposure to the excellent teachers that we had.

I also think it's especially important that we address the need for increasing the number of minority teachers in the classroom. Children from different cultural and racial backgrounds need to see excellent role models after whom they can pattern their lives. We also need to make sure that these teachers have available to them the opportunities they need for their own growth and development.

The strength of this country lies in public education which should be open and available to all children regardless of their race, religion, economic circumstances, or gender. I think it's imperative that our educational system be strengthened and its quality be continually re-evaluated and assessed. The educational system only functions as well as the individual classroom teacher. Our role in Congress is to ensure that every student has access to capable, caring teachers.

I know in my home State of Utah there are many fine teachers who continue to do an excellent job in the classroom, despite high class loads and low salaries. Recently, the Disney Channel recognized Larry J. Peterson from Bonneville High School for the outstanding job that he is doing in teaching students in mathematics. He is just one of many teachers doing a laudable job in classrooms throughout America.

I look forward to reviewing the testimony of our witnesses this morning who can help us fashion a program to increase the availability of well-trained teachers.

I have to apologize to our witnesses because I have to go to the White House, but I look forward to reviewing everything that is said here today. I appreciate those who are testifying. In particular, I welcome my old friend, Mr. Shanker, who I think is one of the leading theorists and thinkers about teaching in America today and for whom I have a great deal of respect. Glad to see you here.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much.

Dr. Shanker, we'd be glad to hear from you.

STATEMENTS OF ALBERT SHANKER, PRESIDENT, AMERICAN FEDERATION OF TEACHERS, AFL-CIO, WASHINGTON, DC; AND LAWRENCE MISHEL, RESEARCH DIRECTOR, ECONOMIC POLICY INSTITUTE, WASHINGTON, DC; ACCOMPANIED BY M. EDITH RASELL, CO-AUTHOR.

Dr. SHANKER. Thank you very much for this opportunity to testify on this legislation which is very important. You have my written testimony, and I will not read it. I would like instead to make three points which are related to the various elements of the legislation.

These three points will deal with, first, focusing the legislation on the need to encourage different kinds of structures in schools. Second, I would like to deal with the issue of alternative certification for which the legislation provides financial assistance to State Governments. And, third, I would like to deal with a strategy which would increase successfully the recruitment of teachers, especially minority teachers, within our schools.

On the first point, I think that given the results that we clearly see from the national assessment of educational progress that only three, four or five percent of our youngsters of those still in school are graduating in the top categories in terms of ability to read, write, understand scientific principles, or solve mathematical—I should say in the case of NAPE just arithmetic verbal problems. And since four or 5 years later as these students go on to colleges and universities we will have to employ 23 percent of them as teachers in our classrooms, it's quite clear that there's absolutely no way, even if we raise salaries, if we make conditions much better, if we draw all sorts of incentives, there is no way, from a demographic point of view, of providing a competent and able classroom teacher in each of our 2.4 million classrooms. And as long as we have a separate teacher in each of our 2.4 million classrooms, we are absolutely certain to have large and increasing numbers of people who themselves are not able to read, write, calculate, or understand any science or social studies, history, geography.

Therefore, I think that we—you know, if you were a manufacturer in an industry, traditionally you are able to get large numbers of people of certain skills, but that the supply of these people change. In order to continue our business, you would have to find ways of running your business with different kind of personnel or in different ways. Therefore, I would strongly suggest that instead of legislation which is aimed at one teacher per classroom, that you focus this legislation, not to get a master national plan to tell everybody down there what to do. Nobody's got that plan. It still has to be developed and discovered. But I think that you need programs that recognize that we're not going to be able to maintain self-contained classrooms as we know them.

The use of interns and residents in schools in ways that are similar to hospitals as a way of both training future teachers and as a way of alleviating the shortage; the use of technology, training teachers in the use of technology; ungraded classrooms which get us away from the problem of do we move a kid on automatically or do we leave him back, both of which are very unhappy; cooperative learning. There are a whole bunch of new notions that are very promising, and I think that the legislation should be targeted in such a way to deal with not just improving individual teachers because there's no way you're going to get 2.4 million of them, and we're going to have an increasing number of people in those classrooms who just can't cut it.

I think what we need to do is to focus this on bringing about school-wide change. How do you get entire faculties of a school together to reorganize a school in such a way that they use their resources more effectively than isolating teachers in individual classrooms, where some classes will be lucky to have a gifted and outstanding teacher, but many others will not.

My second point deals with the issue of alternative certification, and I understand the President's bill provides for funding for alternative certification. I'd like to make a comment on that issue because I'm sure it will be before you.

Given the fact that we're very likely to have great shortages, I think we will need some flexibility in terms of bringing people in who come into teaching in ways that are not traditional. Therefore, I am not opposed to alternative ways of coming in.

I do think, however, that if you have an alternative way of coming in, we ought to monitor these programs very carefully. And I think that there are several problems. One is that alternative ways of coming in should not be used as ways of lowering standards. There needs to be some independent way of finding out whether people who did not meet the ordinary requirements eventually come to meet those requirements in some other way. If the requirements are no good in the first place, we should get rid of them for everybody. But if the State has said these are the requirements which teachers need and we have a shortage right now and we can't bring everybody in who has those requirements at the beginning, there at least ought to be a way of monitoring that later.

Second, I would be very suspicious of any model of alternative certification that asserts the view that all that you need to know to be a teacher is your subject matter; that is, if you're good at mathematics, you can be a math teacher, or if you're good at English, you can be an English teacher. You certainly do need to be good at mathematics to be a math teacher, but we all know a lot of brilliant mathematicians who can get the answer in their heads in three seconds, but they can't explain it to you and they can't find five or six different ways of reaching you if you don't know the first or second way.

There is a body of knowledge which is separate from the subjects that the kids are getting which teachers need to have, and I would be strongly opposed to any proposals that would just say that basically you can become a teacher through some sort of—if you know your subject matter, just throw them in and let them swim and figure out how to work with kids on his own.

Third, that legislation provides for money to go to State education departments to develop alternative certification programs. Well, if there's one thing that we don't need, it's more money going to bureaucracies in education. That's just what that does. If the State wants to do it, they ought to find their own money to do it.

Martin Mayer wrote a book called "The Schools" back in 1961 in which he said that there were more administrators with supervisors in the public schools of New York City than in all of France. This was 1961, before collective bargaining, civil rights enforcement, the various juridical procedures in aid to the handicapped and so forth. I wonder what that comparison would be now.

Then he went on to give an even more startling figure. He said that there were more administrators and supervisors in the public schools of New York State than there were in all of Western Europe combined. So I would be very hesitant to send any funds to increase the bureaucracies that are out there.

My third point, one of the very critical issues is the question of minority teachers. If current trends continue, we just won't have any. We will have a growing minority population among students, and they will look around, not only in their own classroom but in their own school and their entire school system, and they will not find many minority teachers. This is due to a number of reasons. Some of them are very good; namely, that opportunities have opened up in many fields, and the previous discriminatory practices are slowly melting and fading away. That creates opportunities for people. Women as well, who before were not able to enter other fields, now don't have to go into teaching or nursing.

And there are a number of proposals that you make which we support, but I would ask you to concentrate on one which, through our experience, we think is very effective. That is that there are already large numbers of people in the schools working in other capacities, many of them as school aides or paraprofessionals. In all of our urban areas, these people are largely minority people. And in several cities, there are model programs where—for instance, in Baltimore and New York City—the union has negotiated a career ladder program which enables the paraprofessionals to go to college in the evenings and during the summertime while they continue their work as paraprofessionals. And there's strong incentive for them to go to college.

In New York City, 6,000 out of 10,000 of these paraprofessionals are enrolled in college programs, and thousands of them, almost all of them minority members, have gone on to become teachers. Now, when you get people who've worked six, seven, eight, nine, 10 years in a school—indeed, in classrooms with teachers—becoming teachers, they come in as people who are quite experienced. They don't come in as outsiders who decide after 1 month or one term or 1 year to leave. The attrition rate among these people is very, very small.

Not as a substitute for other programs, but given the limited amounts of money, we think that one of the most effective things you could do is to target moneys to people who are already working in schools but who do not have college degrees, and encourage them while they're working in schools to seek a promotion by becoming a teacher, largely through aid for their higher education. And in cities where it works best, we don't have them wait four, five, six, 7 years until they get their degree before they get rewards. As they get 30 credits or as they complete each year of higher education, we generally give them some salary increase to acknowledge the fact that as they get more and more educated, they're more valuable even in the jobs that they now hold within the system.

Those are the three points that I wanted to make, and I just want to return for 1 minute to that first one. It is essential that we don't take an outmoded model of schooling, which is essentially the notion that what teachers do is stand in front of kids and talk to them for five or six hours a day—a model that doesn't work for most kids. Most kids can't sit still for five hours a day. They're like adults who can't sit still that long either. They can't listen to somebody talk at them for that period of time. And I urge you in some ways to shape this legislation in such a way as to encourage change away from an ineffective model.

You really have in terms of your shared decision-making sections, if the flow of money could move toward essentially encouraging the faculties of schools to work together to redesign or reshape their schools, that would be a very important contribution to the solution of this problem.

Thank you.

[The prepared statement of Dr. Shanker follows:]

Prepared Statement of Albert Shanker

Mr. Chairman and Members of the Committee: I am Albert Shanker, President of the American Federation of Teachers. Our union with more than 725,000 members nation-wide has a great interest in the legislation before you which would reestablish a federal role in the area of teacher training and recruitment. National policy makers are gradually becoming aware of the scope of the impending teacher shortage. The bills before this Committee indicate that you are already aware of the need to do something to attract qualified people to the teaching profession. Because of the extent of the teacher shortage, it must be said that while federal action is needed and welcomed by the AFT, neither a legislative remedy nor an unexpected decision by college graduates to enter the teaching force is likely to produce enough qualified teachers to operate the schools the way we do today. Given the overall achievement of today's school structure, as measured by the National Assessment of Educational Progress, the impending teacher shortage can be a blessing in disguise if it forces us to rethink the role and structure of public education.

A shortage of qualified college graduates will force changes in the way we staff schools at all levels. Our nation will experience a severe shortage of college graduates for all fields in the next 10 years. Current demographic projections tell us that, by the early 1990's, our nation will have to replace 1.3 million teachers, about one-half of our current teaching force. To replace those expected to leave teaching, we would need to attract 23% of each college graduating class for the next several years to staff our classrooms. If we want to draw new teachers from the top half of the graduating class, it would take 46% of that group. In 1982, 4.7% of all college students indicated they were heading for a teaching career, in 1985, it was 6% and in 1988, 8.8%. This shows improvement in teacher recruitment during a decade where education needs received tremendous publicity. However, even if other sources of teacher recruitment are fully developed, such as former teachers returning to the classroom; and if the schools do somewhat better at attracting qualified college graduates than in the past, the current structure of education with one teacher in every classroom talking to 30 or more students will still become a thing of the past. These developments are not tragic -- the current system needs to be rethought and reshaped. If we try to maintain the status quo, it can only be done by sacrificing teacher quality in an attempt to carry on educational business as usual. The future structure of our schools must change not only to accommodate a different workforce, but to educate young people for life in a very different economy and society than the one which produced the current factory model of education.

The AFT supports the bills before this Committee. We think that they are well thought-out proposals which will help to improve teacher training and recruitment. By and large, you have chosen the areas of greatest need to concentrate resources. Minority recruitment, bilingual education, early childhood, math and science are all specialties in need of a boost from new initiatives. The tuition subsidies for upper-division college students interested in teaching, taken together with the existing congressional teacher scholarships, should generate new interest in teaching by talented individuals who are not now considering the profession. Professional Development Academies in S.1675 can be used to focus on issues that can have a major impact on the overall performance of our educational system such as school restructuring. It is clear, however, that more must be done than traditional pre-, or, in-service teacher training to meet the challenges that face the schools in the 1990's.

You are aware, I am sure, that there is currently a move afoot to "restructure" education -- to bring the management of teaching and learning to the school level so that teachers have the freedom to accommodate teaching practices to the many different ways that students learn. Its spokesmen, myself included, argue that our traditional factory model for school organization creates an environment that is actually unfriendly to student learning. Today's schools, as yesterday', ignore most of what learning theory tells us about how students learn. The regimented, lock-step character of today's schools limit teacher imagination and style, thus relegating teaching practice to a few set patterns.

At least three sections of this bill acknowledge this problem: Title I, Part B -- Senior Teacher Corps; Title II -- Professional Development Academies and Title VIII -- Shared Decision-Making Incentive. The first two of these merely give a nod to the restructuring movement by including allowable activities that might stimulate restructuring among these granted funding eligibility. The last, which I congratulate you for including, is in need of much greater funding.

I would like to make three specific suggestions:

1. Redefine the eligibility requirements for individual teachers, as well as the requirements in state plans, so that the sabbatical activities of scholarship recipients will be heavily directed at school-wide change.
2. Redefine the purpose of "professional development academies" to be the preparation of both new and experienced staff to restructure schools through shared decision-making.
3. Triple the funding for "Shared Decision-Making Incentive."

I believe that these kinds of changes would make what is now a good bill truly significant. The strategy outlined here could and should make a federal statement about the need to create a totally different kind of school from the ones we have known.

There is currently widespread pervasive recognition among the best education leaders that in these days new dollars demand a multiplier effect in productivity reward. I believe that the sorts of short-term start up funds this bill could make available for school change will save us money down the road as schools necessarily begin to change the ways they allocate resources, along with changes in the ways teachers teach kids. More importantly, the investment represented by these bills must enable our schools to educate a literate, thinking, functional and democratic citizenry.

The effort to establish another teacher corps is strongly supported by the AFT. The emphasis on professional development is well taken, and we believe that focusing in-service training on things that can have major impact, such as school restructuring, will pay dividends.

One major goal of both these bills is to increase the number of minorities entering teaching and to increase the retention rate of minorities who do enter the teaching force. The AFT believes that a major source of minority teachers can be found among paraprofessionals and other school employees. AFT has extensive experience in the creation of career ladders that have led to the development of thousands of teachers out of the ranks of paraprofessionals. These bills should allow funding of teacher education for individuals who already work in schools in a certificated position. It is our experience that teachers who come out of the school employee ranks start with an edge in experience and have a significantly higher retention rate than those who are new to the job. For example, in Baltimore more than 200 paraprofessionals have become teachers. Their attrition rate is less than 5%. The normal teacher attrition in that city is 10%. In New York City, over the past five years 5000 paraprofessionals have become teachers and they have less than a 1% attrition rate. The general attrition rate for New York City was 16.2% in 1986-87.

This legislation is an important priority for the AFT. I thank Senators Kennedy and Pell for their hard work and interest in this important endeavor. Tightening of the focus and emphasis on the issues that will make or break public education in the 1990's will make these bills even better. The teacher shortage about to hit education presents us with an opportunity to rethink the role and structure of our schools.

opeiu#2/aflcio

The **Chairman**. Thank you very much, Al Shanker. Typically provocative, informative, and constructive.

I recognize Senator Pell. He's going to have to chair the Foreign Relations Committee in a short time, so he'll necessarily have to excuse himself. So I'd like to recognize him for whatever comments he'd like to make.

Senator **Pell**. Thank you very much, indeed, Mr. Chairman. I apologize for the brevity of my appearance here. I had a speech at 9 o'clock which made me late.

I'm delighted that you are here.

I look forward to more hearings before the Education Subcommittee, on both Senator Kennedy's and my teaching proposals.

On Friday, February 16, I will chair a hearing on the campus of Rhode Island College in Providence. That will be followed by two Washington hearings, one on Thursday, February 22, and the last on Friday, March 2. Under our current plan, our chairman, Senator Kennedy, and I will then work together to produce one comprehensive bill that we hope will be marked up in both the subcommittee and full committee this coming spring.

As ususal, I found Mr. Shanker's remarks very stimulating, and I look forward to considering them further. I thank you, Mr. Chairman, for coordinating today's hearing. Please excuse me when I have to go. Thank you.

[The prepared statement of Senator Pell follows:]

Prepared Statement of Senator Pell

Senator **Pell**. I am delighted to be here today, if only for a very short while, to reiterate the importance of the legislation we have before us. I apologize for the brevity of my appearance, but already in this session of Congres the complexities of Senate scheduling have made it difficult for Senator Kennedy and me to find common times for hearings on our schedules. I had a speech at 9 a.m. this morning and am about to chair a Foreign Relations hearing at 10, so I leave today's examination of this most important topic in the hands of our able Chairman.

The Education Subcommittee will have several hearings later this month on both Senator Kennedy's and my proposals. On Friday, February 16 I will chair a hearing ont he campus of Rhode Island College in Providence. This will be followed by two Washington hearings—one on Thursday, February 22 and the last on Friday, March 2. Under our current plan, Senator Kennedy and I will then work together to produce one comprehensive bill which we hope to mark-up in both subcommittee and full committee early spring.

Once again I regret my schedule does not allow me to stay today. There is no issue of greater importance to me than the need to improve the status and quality of our teaching profession. I look forward to our future hearings on this topic and extend my best wishes for a productive meeting this morning.

The **Chairman**. Thank you, Senator Pell. You outlined what our agenda and our time frame is, and we are dead serious in both getting this legislation out and having consideration of it on the floor. We're certainly encouraged by what the majority leader has said in terms of giving us a priority place in terms of Senate action. So I think what we do during this period of time can have the kind of positive impact that all of us would hope.

Let me ask you some questions, Dr. Shanker. I know you have some time pressures. Given the traditional concept of local control, what is the Federal responsibility as you see it in terms of trying to move local school districts along the paths that you've outlined here? You're talking about a greater role in terms of the faculty and the local schools. You're talking about finding the best way, at least that you have concluded, of improving the educational experience—rather than the teacher just talking to studnets, that there be some other kinds of involvement of students. These, as you know so well, have been primarily left to local judgments and decisions. How do we deal with the issue that we are trying to put the heavy hand of Washington into the small towns and communities in terms of the education? How do you approach that?

Dr. **Shanker**. Well, I think you deal with the issue by not putting forth any plans, but by stating general eligibility requirements. And the eligibility requirements can be stated in such a way as to deal with the enhancement of skills of individual teachers or the recruitment of individual teachers. That kind of promotes the old model. Or it can be used to support plans and programs which deal with school-wide change rather than enhancement of individuals. Once you get the people in a school together and they start asking themselves: Well, do we have a math teacher? Do we have science teachers. Is there anybody on line at all waiting to become a teacher? Are there other ways of grouping kids and using adults that would take care of our needs?

In other words, I would say no specifics, but just focus it on the question of the school as a unit. That doesn't tell the school board what to do. It doesn't tell them which program or programs to use. But it does give an indication that—I think if you look at the demographics, there's no way of solving it by saying we're going to produce that number of individuals. You can't. Therefore, what you want to do is encourage the individuals who are there to sit down and say, well, if we can't get all the people who meet the qualifications that we used to be able to get by putting people in individual classrooms, how can we do this differently?

That allows for an almost infinite variety of programs to be generated by local school boards. But it does provide an incentive for them to think in different terms.

The **Chairman**. Let me ask this just on the issue of minority teachers which you spoke about. We've heard frequently that the standardized tests serve as a pretty significant impediment in terms of attracting minority teachers. What's your own assessment of how we might proceed to deal with those kinds of issues, assuring quality and still deal with getting minorities attracted to the profession?

Dr. **Shanker**. Well, I don't think that the—I would be in favor of not sticking to one particular kind of test. That is, I know that there are outstanding colleges and universities in this country where if a student says, "I freeze up on that type of examination," there's some other way in which the student can show that he knows his stuff. But I don't think there's any question that you need some mechanism to make sure that people who are coming into the classroom are knowledgeable.

I think unfortunately, given the educational attainment differences—you know, the good news in national assessment is that minorities are catching up very quickly. They're still behind. So if you have a representative group out there and you give that test, you will still find an attainment difference. But pretty soon, I think that's going to disappear. But I do think that the problem with most of these tests right now, unfortunately, is—one of the unfortunate problems is that minorities do fail at a higher rate. But another one is that the overall level at which the cutoff point is established by most States means that large numbers of people, mostly whites, not mostly minorities, are coming into the schools who really are not qualified.

If you look at what some of the cutoff points are, the arithmetic part of the test is usually questions that the kids get in sixth grade, and the passing mark for the teacher on these is the same as the passing mark for the kids. That is, if a teacher gets 65 percent on a sixth-grade arithmetic test, the teacher passes. Then we wonder why we are at the bottom in all of our international science and math assessments when we compare ourselves with other countries. The fact is this is the only country in the world where huge numbers of elementary school teachers feel very uncomfortable with arithmetic and where the majority of them will tell you that they really don't know very much about science.

We've got a terrible problem because I just said that there are shortages, and there are going to be greater shortages. One way to end the shortage, of course, is to just drop requirements. But then you're not bringing people into the classroom who are able to teach. I think the way to deal with the issue of a larger number of minority teachers is not to drop standards but to do a good job in preparing and cultivating minorities to become teachers—minorities especially but others as well. I don't believe that they're incapable of learning any of the things that they need to know.

I think there are really two approaches. One is to abandon standards, which I think does a great disservice. I think the other is to assume that they can do a good job, but they come from schools that have not been adequate. They have not have many of the opportunities they should have to overcome all sorts of problems. And I think we ought to reach out and provide that special assistance.

There are a number of model programs across the country that are very successful where minority youngsters are helped, some of them in high school, some of them in college. And they move to very high levels of attainment. I would prefer to see a program which would lift people to meet the standards rather than one which abandons the standards, which I think are already very low.

The **Chairman**. Will you provide for us some of the specific models of alternative certification which you find satisfactory? Do you want to make any comment on it, or will you provide us with that for the record?

Dr. **Shanker**. Yes, I'll be glad to do that.

[The information of Dr. Shanker follows:]

TEACHER RECRUITMENT INTERNSHIP PROJECT FOR SUCCESS (TRIP)

EXPLORING COLLABORATIVE MODELS FOR INDUCTING NEW TEACHERS

Albert Shanker
President
American Federation of Teachers

Eugenia Kemble
Assistant to the President
Educational Issues Department

Carolyn Trice
Project Director
Educational Issues Department

March 1, 1990

Honorable Edward M. Kennedy
U. S. Senate
Washington, DC 20510

Dear Ted:

As a follow-up to my testimony on January 30 before the Senate Committee on Labor & Human Resources, I am submitting, per your request, two models of alternative teacher certification that were developed in conjunction with AFT locals.

The models are from a soon-to-be-published AFT document, "Teacher Recruitment and Internship Project: Exploring Collaborative Models for Inducting New Teachers." These models emphasize the importance of the collaboration between the school district, the local union, and the university.

The Dade County program focuses on attracting academically capable liberal arts graduates into teaching in critical shortage areas. This model includes a rigorous course of study and an internship program with a qualified veteran teacher.

The San Francisco model illustrates an innovative approach to attracting more minorities into the teaching profession. This example focuses on recruiting paraprofessionals, with their experience and knowledge of the school communities from which they come, into teaching positions. Like the Dade County model, this collectively bargained program includes rigorous course work and intensive support for the prospective teachers.

I am pleased that you will consider these models, and the AFT's views on alternative certification as you continue to seek answers to the imminent shortage of teachers in our nation's schools.

Sincerely,

Albert Shanker
President

Acknowledgment

The extraordinary programs and developments from the TRIP Project was the result of Primerica, Inc's., vision and suppport for funding a program to improve teacher recruitment and induction. TRIP is a sterling example of the good that can be brought through business/education partnerships. The APT would like to express its appreciation to Primerica, Inc., for its support.

THE TEACHER RECRUITMENT AND INTERNSHIP PROJECT

In response to this overwhelming call for reform in how the profession recruits, trains and retains its members, the American Federation of Teachers, with the support of a planning grant funded by Primerica Corporation of America (formerly American Can Company), is addressing the issue of attracting and retaining talented teachers and encouraging non-education majors with knowledge and skills in critical subject-matter shortage areas to enter the profession through its Teacher Recruitment and Internship Project (TRIP). TRIP is designed to revise the recruitment, selection, preparation, induction and licensing of first-year teachers. The purpose of the project is to:

1) attract prospective teachers by exploring non-traditional recruitment strategies such as incentives for non-education college graduates and para-professional career ladders;

2) provide a structured internship for beginning teachers to facilitate success in the initial teaching experience and abolish the "sink or swim" teacher induction method;

3) offer talented, experienced teachers new career opportunities, as mentors to the beginning teacher, while retaining their teaching roles; and

4) influence teacher preparation programs by encouraging them to integrate research-based knowledge about effective teaching into their curricula.

In cooperation with selected local affiliates, the Teacher Recruitment and Internship Project (TRIP) began initial planning in 1985 to recruit and retain promising and academically successful beginning teachers. The project influenced teacher induction programs in nine locations--it supported planning, recruitment and implementation activities in three sites, planning only in three, and supplemented existing programs in three sites. Fundamental principles of institutional reform required that each locality involve representatives of collaborating institutions from the outset. Local circumstances determined specific actions, roles, and responsibilities. However, the following common principals and program components were intended to be part of each local project.

Intern Recruitment

Every project included a recruitment strategy that offered, at a minimum, the following incentives for college graduates to consider teaching: a) initial support through an internship and seminars which focus on the needs of the beginning teacher; b) university coursework coupled with the internship that leads to certification, without having to invest a sizable portion of undergraduate education in teacher training; c) cancellable loans or equivalent support in return for completing a teaching service requirement beyond the internship.

Mentor Teachers

Experienced, effective classroom teachers were to have primary mentor responsibility for the intern teachers. Mentor teachers would be recognized as superior teachers by supervisors and colleagues; would be willing to enhance their professional growth by attending special training sessions and/or university courses, and by sharing their expertise with beginning teachers; and would participate voluntarily in the program.

Collaboration

Each project involved representatives from participating institutions from the initial project planning period through implementation of the program. Therefore, every project included a collaborative involving representatives from the local teacher's union, school system, and university(ies) with a wide range of graduate and professional programs.

Local Ownership

Within the constraints of the fundamental program purposes, specific plans, roles, responsibilities, and operations were determined by representatives of collaborating organizations. Each project included plans to sustain the project beyond the initial implementation phase. Planning grants of approximately $10,000 each were used for purposes determined by the local site. The following types of costs were covered:

1) part-time compensation (or released time) for a project facilitator
2) travel to meetings or retention of consultants
3) stipends or released time for teachers
4) meetings or retreats
5) secretarial support and assistance

Site Selection

Site selection was based on a mutual agreement between AFT and the Primerica, Inc., and a locality's ability to meet the following criteria:

1) A local AFT chapter with the ability to develop (if not already in existence) a cooperative working relationship with the local school system and university(ies).

2) A location near a university with a variety of graduate and professional academic programs.

3) A local AFT chapter with a willingness to take a leading role in teacher and school improvement efforts.

4) A local chapter willing to work with the AFT Educational Research and Dissemination Program.

5) An agreement by the local AFT chapter, school system, and university(ies) to collaborate on the internship recruitment project.

RESPONSIBILITIES

American Federation of Teachers (AFT)

The AFT was responsible for the overall program operation and quality, including dissemination efforts. AFT also provided planning, consultation, and training resources for local site development. The AFT shared the knowledge from its award-winning Educational Research and Dissemination

(ER&D) program to prepare teacher interns and mentors in effective teaching strategies. In addition, AFT assisted in the development of seminars and assistance programs for beginning teachers and worked with several universities engaged in the reform of their teacher preparation programs.

Local Project Sites

Each local project was expected to engage in the following activities:

1) enter into a three-part collaboration [union, school district, university(ies)];

2) develop a recruitment program that would attract academically talented college graduates, or paraprofessionals through career ladder incentives, into teaching;

3) establish a fellowship or equivalent program that pays tuition for university courses for TRIP teachers;

4) develop an internship program in one or more local school sites;

5) reward mentor teachers by providing them with compensation or tuition waivers in a collaborating university, where possible;

6) implement the first recruitment effort; and,

7) initiate a summer seminar to prepare recruits for their internship assignment.

Each site was responsible for determining the activities of participating organizations in the collaborative. The following are general guidelines that were used:

AFT local chapter: initiation of the local site project; coordination of project planning; cooperation in the selection of school sites and mentor teachers; coordination of mentor training; securing outside consultation through AFT and other sources; and working with AFT to recruit intern candidates [other than those recruited through the collaborating university(ies)].

School system: cooperate in the identification of intern-mentor positions for the new recruits; cooperate in the planning process and selection of internship sites; prepare school principals and other school personnel to facilitate project implementation; provide released time for interns and mentors to work together; work to secure needed regulatory waivers and approvals, and cooperate to institutionalize the project and extend it beyond the initial effort.

University: cooperate in planning and developing seminars in coordination with the internships; assist in the recruitment of interns from among alumni and prospective graduates in subjects identified as critical shortage areas, collaborate on the development of fellowships or tuition waivers for intern-teachers; work to assure certification for recruits who successfully complete the internship and seminars, and assist interns who wish to pursue graduate study upon completion of the teaching service requirement.

MIAMI

TEACHER RECRUITMENT AND INTERNSHIP PROGRAM (TRIP)

CONTEXT

The metropolitan area of Miami is actually 26 separate communities and a large unincorporated region. Although none of the cities rank significantly among the largest cities in the nation, the region is considerable if political boundaries are ignored. The greater Miami area is one of the fastest growing regions of the nation and will continue to have significant growth due to migration from other states and immigration from the Caribbean and Central America.

The general economic health of the metropolitan area, and that of the entire state, is strong. The unemployment rate for the state is 4.1 per cent, the lowest in fourteen years. Despite in-migration, jobs are plentiful. The growth of resorts and tourism, telecommuications, transportation, the Port of Miami, and service industries provide considerable opportunities. Many national and international corporations have located their headquarters in the region. Presently, Miami is suffering from a labor shortage in certain segments of the economy, similar to the problems of New York, Boston, and other large cities. There are plans to build a new "city" or downtown region because of the large population and the impact of commuters on the roadways. Within the next decade, Florida will be the third most populous state behind Texas and California. Much of the growth will be in Miami and southern Florida, further straining the capacity of the school district to meet the needs of students.

The Dade County school system is comprised of a "majority of minorities." The current figures for ethnic classification of students are 43% Hispanic, and 38% Black and 19% Other.

The public schools in Florida are organized by county districts. Thus, the public school system for the greater Miami area is the Dade County Public Schools (DCPS). The Dade school system is the fourth largest district in the nation with an enrollment of 265,000 students.

Traditional Relations Among Collaborating Groups

The collaborating groups are the Dade County Public Schools (DCPS), the United Teachers of Dade, (UTD) and the University of Miami School of Education (UM). Cooperative efforts among these groups have been excellent over the last few years. The union and school district have just negotiated a new collective bargaining agreement that will provide new teachers with one of the highest entry salaries in the nation and higher salaries in general for veteran teachers.

In the section entitled "Professionalization of Teaching and Education," the contract covers other professional issues programs in addition to TRIP. Included in this section are the Teacher Assessment and Development System (TADS) that involves teachers in peer evaluation and assistance; school-based management and shared decision-making that establishes new models for staffing, decision-making and planning at the school site; the Dade Academy for the Teaching Arts (DATA) that offers staff development and professional growth courses; a Saturday school program that provides instruction and enrichment activities for students; and satellite learning centers, cooperative ventures among the union, school district and businesses throughout Dade County, that establish schools from kindergarten through second grade in facilities provided by a host corporation.

The School of Education at the University of Miami (UM) has held joint cabinet meetings, attended by union representatives, on a monthly basis for over a year. These cooperative efforts have grown from a common interest in the improvement of education, partly as a response to the general reform movement and out of a need to address a variety of common problems and interests of the various groups. Until the new Superintendent and the new Dean of the School of Education arrived to lead their respective institutions, cooperation between the school district and the college was achieved by the individual efforts of professors who worked with various administrators and teachers on independent projects. Over the last two years, active planning has occurred at the levels of the chief executive officers to outline ways of cooperating in matters of research, program development, and training. Formal procedures have been implemented to reduce the bureaucratic barriers to cooperation.

Climate for Reform

The union and the school district have a history of being in the vanguard of initiating change and have received national attention for such innovative programs as school-based management, shared decision-making, and satellite schools. The climate created by the education reform movement was probably the most powerful influence on the success of the implementation of TRIP.

Teacher Supply and Demand

The State of Florida currently produces about 40 per cent of the teachers it needs. The greatest shortages are in secondary mathematics, science, English, foreign language, and special education. There are also local shortages--some school districts have significant difficulty filling specific positions due to local circumstances of supply and demand, and working conditions. Presently, the greatest need in Dade County is for teachers in the inner-city schools.

The Dade County Schools have an active personnel staff charged with the responsibility to recruit teachers. Strategic and tactical plans have been developed for recruitment. The staff aggressively advertises for and interviews potential teaching candidates throughout the nation. In addition to the staff, former recipients of the "teacher of the year" award are used to attract candidates on recruiting missions. The staff is highly trained and follows a specific set of policies pertaining to recruitment activities. There is a strong evaluation component, including surveys of candidates who do not elect to take a position. This is because 40 per cent of all new hires in Dade County Public Schools are from out of state.

There are significant opportunities for careers in other fields, including the lure of entrepreneurial enterprises. Generally, persons with abilities and interests in mathematics, science, and English have opportunities to enter many other fields. The first group of TRIP graduates has been attracted to the area through outside recruitment and advertising efforts. It appears that it is easier to attract people from out of state than to find interested, qualified arts and science majors in the immediate area. The majority of the group is relatively young and from out of state. Most of them are teaching mathematics, science, and English. The local recruits tend to be older, having shifted from one career or experienced difficulty with finding employment in their fields. Due to the ethnic diversity of the student population, the Miami school system is constantly looking for minority teachers. Fifty percent of the current interns are from minority groups.

Like most states, Florida has followed a pattern of licensure and certification dependent upon meeting specific coursework in a teacher education program. In addition, Florida was one of the first to require teachers to pass a competency examination, the Florida Teacher Certification Examination (FTCE). Despite the trend in recent years to disregard professional teacher education courses, as in New Jersey, Florida maintains professional coursework in the certification processes with the focus clearly on competencies and transcript credits.

Composition of the Collaborative

The organizations involved in TRIP are the Dade County Public Schools, the United Teachers of Dade, and the School of Education at the University of Miami.

The personnel assigned to the project include a professor of education from the University of Miami who has been the coordinator of TRIP and director of the training program; a representative from the Office of the Superintendent, Dade County Public Schools; and a representative from the United Teachers of Dade.

An advisory group composed of two principals, two central staff personnel, two representatives of the union, and two faculty members of the university, meets periodically with the assigned personnel to discuss the TRIP program, monitor progress, and report concerns to the various organizations.

In any social and organizational interactions of groups, the tendency for control or power to become an issue is always a threat to progress or change. This is informally referred to as "politics." In the underlying interactions of the school administration, the union, and the university, "politics" was never an issue. The union and the district administration fully recognized the need for teachers in the inner-city schools. They also initiated the TRIP plans without delay. The University of Miami readily facilitated the cooperative relationship among the three groups. The ability of the organizations to work cooperatively on this endeavor is explained by the continuous interactions of college faculty with the school district and the union over a period of many years, and by the need for new teachers in the district. The main reason so little conflict exists is because a specific set of guidelines and procedures which specifies the roles of all participants has been approved and implemented by the school district, teachers' union and the university. This greatly reduced ambiguity and the potential for conflict.

PROCESS

Faced with a growing shortage of teachers in secondary mathematics, science, computer science, and language arts, the Dade County Public Schools and the United Teachers of Dade (UTD) collaborated to devise a plan for the TRIP program. Subsequently, an RFP for the project was sent to the universities in the area. The University of Miami submitted a proposal and made a formal presentation which was approved. The plan proposed a two-year alternative certification program to select, prepare, and mentor newly hired liberal arts graduates for positions in inner-city secondary schools. The program was designed to recruit, train, and retain liberal arts graduates in the teaching profession. There were few models to follow, so the Miami TRIP program was experimental. The program attempted to meet the needs of the school district, the profession, and the union by compromising on many points of contention to provide a structured internship and training program leading to certification and a Master of Science in Education degree.

The TRIP program was based on the following assumptions, and agreed to by the UTD and the DCPS:

- The teacher shortage will become increasingly acute in inner-city schools, especially in the fields of mathematics, science, and language arts.

- Academically capable liberal arts graduates may add significantly to the teaching profession if alternative teacher certification programs can be agreed to by the school district, the union, the state board of education, and the profession.

- An effective teacher training program can be conducted through the collaboration of the teachers' union, the local school district, and a university.

- A teaching internship program and a formal course of study related to practice can be an effective training model.

Decisions are made by a committee consisting of a central office administrator, a union official, school principals and university representatives, who meet on a regularly scheduled basis.

Prior to selection of the University of Miami to be the training institution, a committee composed of members of the Dade County Schools and United Teachers of Dade met several times to determine criteria and to set guidelines. This committee agreed to the following:

- A maximum of 30 candidates and 15 mentor teachers to be involved during the pilot year.

- TRIP teachers to be placed in critical shortage areas in secondary schools which participate in the School-Based Management/Shared Decision Making Program or the Partners In Education Program (PIE).

- Each TRIP teacher is to teach four periods (on a seven-period schedule), plan one period and engage in TRIP-related activities during the remaining periods.

- The mentor is to be assigned two TRIP teachers, with the mentor receiving a supplement of $1,500. The mentor is to teach five periods, plan one period and engage in TRIP mentoring activities during the remaining period.

Upon acceptance of the University of Miami proposal, the associate dean and TRIP faculty director/advisor met with the representatives from Dade County Public Schools (DCPS), United Teachers of Dade (UTD), and the TRIP committee to outline the training program and determine its completion. Members of the faculty of the university submitted a rationale to the committee for the selection of courses and documentation of the correlation of the state's generic competencies with the university graduate program.

The TRIP committee meets regularly to discuss problems and matters of interest and to monitor the program. At the building level, the university advisor, the teacher mentor, and the principal interact. Information flows from the individual sites to the TRIP committee (in the form of reports from the various groups and individuals).

THE PROGRAM

In accordance with the school district and the union, with participation by the university, five major objectives were developed:

1) to implement a field-based program combined with training, research, support, and guided supervision;

2) to provide substantial training, concurrent with teaching assignments and strong support;

3) to deliver a program meeting state certification requirements and practical pedagogical needs of teachers;

4) to provide a heuristic model based on empirical data to address three major questions:

   a) Can liberal arts and other non-education graduates, lacking traditional qualifications, become effective teachers?

   b) Does a program blending traditional coursework in professional education with field-based work promote teaching effectiveness?

   c) How do the attitudes and skills of teachers in the experimental program compare with the graduates of traditional programs?

5) to determine if alternative teacher training programs can provide new options for selection and training of effective teachers to replace or revise traditional models.

Through agreement with the school administration and the local union, a plan was developed with the university playing a major role as arbiter and ombudsman. Thirty interns/beginning teachers were enrolled in the program in the 1987-88 school year. Candidates were selected by the school administration to fill specific, documented vacancies in the inner-city high schools of the district. The interns, called associate teachers, were assigned to specific schools and received an orientation program. Each intern was assigned to work with a mentor teacher, given the assistance of an aide, and received significant supervision and contact with representatives of the school, union, and university supervisors. During the first year of the program, interns received full salary and were assigned to four periods of instruction (the full load is seven periods). The three released-time periods allowed the interns to engage in planning and school-based requirements for coursework. All mentor teachers received a reduced teaching load to permit involvement with their interns.

Persons hired under the TRIP program are paid salaries equivalent to beginning teachers in the district. Dade County schools offer one of the highest entry-level salaries in the nation and have excellent benefits. Currently a beginning teacher with a bachelor's degree may earn $23,000 and a teacher with a master's degree may earn $26,000. Tentatively, plans for 1989-90 year include a starting salary around $26,500.

Each semester, the interns were enrolled in two graduate courses specifically designed and conducted for them. They were also required to attend a summer session after the first year. The coursework in the program was composed of 39 credit hours; six of these credits were in a graduate teaching internship. The program also provided orientation and evaluation sessions for the TRIP teachers and mentors. Assignment of a personal advisor from the University of Miami was made for each TRIP teacher to ensure individualization. Also, the advisor was required to make frequent classroom observations and visits with each intern. This was in addition to observations by the union representative, the mentor teacher, and the school administration. The program provided for the award of credits for the internship based upon classroom teaching experience during the first two years of employment; on-site supervision by the mentors, who received training in peer coaching and a free graduate course at the University of Miami as an incentive; and periodic classroom observations and assistance from the University advisors during the first and second years.

Funding

Funding is primarily required for the salaries of the interns and the costs of training. The cost of graduate work at the University of Miami is $395 per credit. A three-credit course costs one student $1,185. A 39-hour degree program costs $15,405. For 30 students, the cost of one three-credit course is $35,550, and the total cost of thirty degree programs is $462,150.

With the UM discount of 50 per cent for DCPS teachers, the cost per student per credit is $198. A three-credit course costs $594, and a 39-credit program, $7,722. For 30 students, with the discount, the cost of one three-credit course is $17,820, and the total cost of 30 degree programs is $231,075.

Under the provisions of the DCPS tuition reimbursement plan, half of the cost of a master's program can be reimbursed, either to the student or to the institution. If a DCPS teacher takes advantage of this plan as well as the UM discount, the cost per credit is reduced to $98; the cost for a three-credit course to $294; and the cost per 39-credit program per student to $3,822. Both the university and the school system have contributed to the financial support of the TRIP program, the university by reducing its costs for this special program and the district by paying tuition.

Fiduciary responsibility rests with the United Teachers of Dade for the planning grant and with the school district for intern and mentor teacher salaries. The university submits an invoice to the district for services rendered.

Intern and Mentor Selection Process

The purpose of TRIP is to recruit capable liberal arts or equivalent college graduates. Prospective TRIP teachers are informed of the benefits to them, including the salary of beginning teachers, reduced class load, and a structured program for certification and a Master of Science in Education degree.

As noted, the primary recruitment incentive for interns is the ability to obtain a graduate degree at no cost to the student. The mentors are given additional pay by the district for assuming responsibility for working with interns, and the university provides a graduate course, free of charge, to any mentor who participates. This can satisfy requirements for additional study that is rewarded by the district through pay increases.

The mentors are selected from participating schools from among those who meet the following qualifications: they must be certified in the appropriate subject area, have at least three years of successful teaching experience, and be master teachers.

New teachers are hired by the personnel office of the school district. To be considered for the TRIP program, the candidate is approved by a committee consisting of representatives of the district, school and UTD and selected by a principal who has a vacancy. The individual begins the training program. Through a combination of traditional and field-based course-work (at the school site), the candidate may become a certified teacher after meeting course requirements and successfully passing the Florida Teacher Certification Examination (FTCE). If the candidate agrees to participate in the TRIP program, he or she is required to remain as a teacher in the district for three years.

Admission to the university for a degree requires the following materials necessary for review regarding admission to the University of Miami Degree Program:

1. Completed application form

2. Transcripts from previous colleges/universities

3. Three letters of recommendation from individuals
   or
   One letter of recommendation from a DCPS personnel officer

4. Test score on a nationally standardized test. Applicants who have taken the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT) should submit their test results. Applicants who have not taken either examination may take the MAT through special arrangements at the University of Miami.

5. Writing sample.

To earn the Master of Science in Education, the participant must complete 36 to 39 credit hours with a grade point average of 3.0 and successfully pass a comprehensive examination. The student may have to meet additional requirements to satisfy state regulations. Individualized planning is provided for each participant.

All of the courses in the program emphasize professional standards in education and focus specifically on the unique needs of the Dade County Public Schools.

University Component

In addition to the courses required for completion of the degree and certification requirements, UM offers the following benefits to TRIP interns:

- Orientation and evaluation sessions for TRIP apprentices and mentors;
- Assignment of a UM advisor to the TRIP degree program, who would be accessible to all participants for general guidance;
- Assignment of a personal UM advisor to each TRIP apprentice for the purpose of ensuring the best possible individual program;
- Instruction and supervision by nationally recognized faculty in special education and supporting fields;
- Inclusion in the course credits of a six-credit-hour graduate internship;

- Awarding of credit for classroom teaching experience during the first two years of employment with DCPS;
- On-site supervision of activities by the mentors, who would receive a free graduate course in education at UM in return for their services as directing teachers;
- Periodic classroom observations and ongoing assistance from a UM professor, not only during the first year of employment, but also during the second year; and
- Invitations for TRIP interns to all graduate activities on campus.

Training for TRIP teachers begins at the point of selection. Mentors are involved in training by the university, with content of the training covering rationale for mentors, responsibilities, conferencing skills, and research related to effective teaching.

Evaluation Component

To determine the effectiveness of TRIP, three specific questions were posed and a method for data collection determined:

Question 1: Are the interns more knowledgeable about professional education in areas related to research and principles in educational psychology, curriculum, classroom management, classroom-based research, sociological aspect of the teaching profession, and effective teaching, as a result of graduate studies during the TRIP experience?

Supportive Data: In the fall of 1987, the interns were administered a cognitive test, A GLIMPSE OF TRIP. This instrument will be administered again in December, 1988. Data from the pre-and post-tests, will indicate cognitive growth of the interns.

Question 2: Do interns' attitudes toward teaching change over the period of time in which they are enrolled in TRIP?

Supportive Data: In the fall of 1987, the instrument, PERSONAL BELIEFS OF INTERNS IN THE TEACHER RECRUITMENT AND INTERNSHIP PROGRAM, was administered to the interns. This same instrument will be administered again in December, 1988.

Question 3: What level of teaching effectiveness do the interns demonstrate?

Supportive Data: Holistic assessment datum was gathered on each intern in the fall of 1987. Three UM adjunct faculty and recently retired DCPS administrators visited the interns and assessed the level of their teaching effectiveness. A second classroom observation will be conducted in December, 1988.

Other evaluation is primarily focused on the Florida Competencies and university coursework, as well as evaluations by principals, mentors, professors, and others who make classroom observations.

ISSUES AND BARRIERS

DCPS, UTD and UM are creatively tackling many problems facing this large urban school district. There has always been cooperation between the schools and the university and, under the direction of the superintendent, collaboration has resulted in the formal announcement of the Dade Education Company--an agreement between DCPS, the UTD and UM to work more closely to explore ways to address major concerns facing educators.

The sheer size of the local district is detrimental to inter-institutional collaboration; however, size has not functioned to limit cooperation. Each institution has clearly recognized the needed strength of the other if professional growth is to occur.

Within the last few years, there has been nationwide concern that teacher training institutions are not preparing students who can teach effectively. This concern prompted several school districts to become "teacher trainers." For the most part, educators in Dade County recognize and appreciate the responsibilities of each institution, leaving the conduct of these responsibilities to the province of the institution most capable of dealing with various issues.

Each TRIP teacher has the benefit of a mentor teacher; however, mentoring cannot be done on a full-time basis.

Intensive coaching is needed during the first semester of teaching.

The implementation of the planned two-year internship program cannot begin until the TRIP teachers are selected and, sadly, selection is not finalized until after the opening of school. Because the teachers are not identified early, common scheduling of TRIP periods, TRIP activities for mentors, and special activities for the TRIP teachers cannot occur or are enormously difficult to orchestrate.

Accomplishments to Date

The program is in its second year of implementation. Twenty-nine out of thirty of the first group of interns has completed the initial year and their preparation continues. A second group of thirty interns have begun the program.

The most notable accomplishment is the instutionalization of the Teacher Recruitment and Internship Project in the Dade County Public Schools. When the second year of the program began, TRIP had been included in the recently negotiated collective bargaining contract between the union and the school district. The contract describes the purpose of TRIP and delineates the guidelines and procedures to be followed.

The TRIP program has also solidified the relationship between the University of Miami School of Education and the United Teachers of Dade and the Dade County Public Schools. The success of the TRIP collaboration has forged the way for other university-union-school district collaborations such as the Dade Education compact described earlier.

Recommendations

The Miami TRIP collaborative has made a great commitment to the program in terms of funding, institutionalization and time spent developing and coordinating the project. The following recommendations would make it a stronger program and a model to be replicated around the country. The Miami Teacher Recruitment and Internship Program would be a demonstration project in two respects: first, as an induction program for all beginning teachers--especially those without certification; and secondly, as an example of a collaborative effort among the teachers' union, the school district and the college of education to improve the quality of instruction offered children.

The following are recommendations for the program:

1) There should be a summer training program for TRIP interns and mentors to introduce them to the latest research on effective teaching, peer coaching and supervision of teachers. Although these topics are covered in the coursework over the eighteen-month program, beginning teachers, especially TRIP candidates who have no teacher education background, should be exposed to this knowledge prior to entering the classroom. The union sponsors training through their Educational Research and Dissemination Program (ER&D) which can be adapted to train TRIP candidates as in other sites.

2) Mentors and their assigned associate teachers should have common planning periods to facilitate the mentor/intern relationship. Mutual meeting time should be programmed into their regular schedules.

3) TRIP teachers should be identified prior to the beginning of schools. This would facilitate the implementation of the aforementioned recommendations.

4) Evaluation data proposed in the program should be collected and analyzed as soon as possible.

SAN FRANCISCO

PARAPROFESSIONAL CAREER PROGRAM TEACHER RECRUITMENT AND INTERNSHIP PROJECT

The San Francisco Unified School District (SFUSD) is a kindergarten-through-grade 12 district that encompasses the 49 square-mile boundary of the city and county of San Francisco. The district's 3,800 teachers serve nearly 65,000 students. San Francisco is a majority minority school district. Eighty-five per cent of the students come from ethnically and culturally diverse backgrounds. Approximately 17 per cent of the San Francisco public school students are Black, 17 per cent are Hispanic, and 40 per cent are Asian (including Chinese, Japanese, Filipino, Vietnamese, Laotian and Cambodian). Thirty-four per cent of the students come from homes in which English is not spoken.

San Francisco is a growing school district. Enrollment has increased by approximately 2 per cent for each of the last six years. This trend is expected to continue. Many of the students coming to San Francisco are recent immigrants to this country, primarily from Central America and South East Asia.

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Fewer than 30 per cent of San Francisco's population have children in the city's public schools. Many middle-class parents choose to send their children to private schools and a significant portion of the city's population is composed of singles without children. Of the nearly 90,000 school-age children in San Francisco, one-third attend private schools. Parochial schools account for two-thirds of this private school population. In an effort to keep the middle class in public schools, the school district has implemented a number of special programs (such as alternative schools) in the last few years. It appears the district's efforts are beginning to pay off.

The average teacher in San Francisco is 53 years old. Thus, the school district estimates it will need to replace at least half of its teaching force within the next five years.

In 1969, San Francisco hired several hundred teachers, many of them minorities who had been recruited from out of state as a result of the district's national recruitment efforts. For a decade, from 1969 to 1979, the district effectively had a hiring freeze. Almost no new teachers were employed during this period.

In 1979, San Francisco experienced massive teacher layoffs. State law requires layoff in reverse seniority order. Thus, many of the laid-off teachers were the minorities who had been hired in 1969. Three months after final layoff notices were sent, the school district began calling people back to work. Many, including a large proportion of minorities, had found other, more attractive jobs and declined the district's offer of employment.

California enacted a major education reform bill in 1983. The new law provided huge increases in funding for schools, enabling the SFUSD to hire 400 probationary teachers between 1983 and 1986. Some of the teachers were minority; many were not. The district discovered that few minority candidates were enrolled in teacher training programs in the Bay Area's colleges and universities. Moreover, the district had (and continues to have) immediate need for teachers in the areas of mathematics, science, bilingual education, and special education. Prospective teachers in these fields are in particularly short supply. In California, one must possess a bachelor's degree in an academic subject (i.e., not education) before being admitted to a credential program. The program to earn a teaching credential is, thus, a fifth-year graduate program. The California State University system trains 90 per cent of the state's teachers. In San Francisco, San Francisco State University (SFSU) has the largest teacher training program.

Recruitment efforts are conducted by the school district's central office staff. Individual school sites have no independent authority to hire. San Francisco school district officials report they have been frustrated in their efforts to secure sufficient members of minority teachers and sufficient numbers of teachers in the immediate shortage areas. Even national recruitment efforts have not met the district's needs. The district has also tried hiring foreign teachers--bilingual teachers from Spain, math teachers from China. However, language and cultural difficulties brought these teachers' stays in San Francisco classrooms to a halt. Many of the foreign teachers had classroom management problems and could not pass the language and writing sections of the California Basic Educational Skills Test (CBEST) which is required for certification. In many instances, the district has been forced to hire uncredentialed people on "emergency" certificates.

Compounding the district's problems is its recognition that, while there are four immediate areas of need (math, science, bilingual and special education), teacher shortages in all areas will soon exist. Increasing numbers of teachers are retiring. Moreover, the state has recently increased high school graduation requirements and the University of California system has raised its admission requirements. Thus, students will be required to take more academic classes and more teachers will be needed to teach these courses.

Composition of the Collaborative

The participants in the San Francisco Para-Career Program are the San Francisco Federation of Teachers, (SFFT) the San Francisco Unified School District (SFUSD), San Francisco State University (SFSU), and the University of San Francisco (USF).

The San Francisco Federation of Teachers is the official bargaining agent for the SFUSD's 2,000 paraprofessional employees in which more than 69 per cent are minority. Many have worked in San Francisco schools for a decade or more. These individuals' levels of education vary, from those who have completed only high school, to others who have earned bachelor's degrees.

The AFT has long worked to improve the lot of paraprofessionals. Part of that improvement process includes a commitment to develop with the school district a program to help paraprofessionals who want to become teachers to earn teaching credentials. The San Francisco Unified School District's then new superintendent eagerly embraced the idea of the para-career/teacher internship program and appointed his second-in-command to be his personal representative on the planning group. This action had particular significance in San Francisco.

The San Francisco Federation of Teachers and the San Francisco Unified School District have had an historically stormy relationship. The previous superintendent made no pretense of liking the union. The union reciprocated in kind. The atmosphere with the current superintendent and the current union president is entirely different. The union and the district view the para-career/teacher internship program as one way to achieve several mutually beneficial goals: providing new career opportunities for paraprofessionals, providing the district with some of the teachers it needs, and securing a better relationship between the union and school district management. The hallmarks of this program have been the mutual cooperation between and equal partnership status of the AFT local and school district administration.

San Francisco State University is part of the 19-campus California State University System. The university has a longstanding, cooperative relationship with the school district, largely because San Francisco State places many of its student teachers in the city's public schools.

The University of San Francisco is a private, Jesuit-run institution with a growing school of education. The school's dean is eager to upgrade the image of his school and has hired a credential program director who is very enthusiastic about the para-career/teacher intern program. In addition, USF's supervisor of student teachers, who often attends planning group meetings, is a retired San Francisco teacher and a long-time member of the San Francisco Federation of Teachers. The SFUSD and USF have a longstanding, cooperative relationship. Many of the district's administrators attend USF to earn advanced degrees.

Each of the players in the collaborative sees the benefits of participating in the project. The union views the program as a way to offer new professional opportunities to the people it represents. The school district looks to the program as one mechanism to handle its inevitable teacher shortage. San Francisco State wants to maintain its positive relationship with the SFUSD and believes the university, too, may have something to learn by participating in the program. USF sees the increase in minority students in school of education as a way to enhance its image and also expand the number of minority candidates for graduation.

Process

The SFUSD and the SFFT had previously negotiated a provision in the paraprofessional contract calling for the establishment of a paraprofessional career development program, leading to a teaching credential. When San Francisco was selected as one of the sites to receive a Primerica planning grant, the president of the union approached the superintendent with the idea that the money be used for the paraprofessional program. The superintendent readily agreed. Both parties further agreed that the teacher training component of the program should be constructed as a teacher internship plan. The union then contacted San Francisco State and the University of San Francisco. Both universities initially agreed to send representatives to a preliminary planning meeting and, of course, have continued to participate in the project.

Each organization appointed one or more representatives to the planning group. In the initial year of the program, the SFFT used part of the planning grant money for a stipend for a local program coordinator. The coordinator, a full time San Francisco teacher who spent the 1985-86 school year at Stanford University as an AFT Distinguished Visiting Practitioner, has been the primary SFFT representative to the planning group. The school district initially released the teacher two days each week to coordinate the program. Now with the increased numbers of paras participating in the program, the district has released the teacher to coordinate the program full time.

The school district has been represented on the planning group by the deputy superintendent and by a personnel officer. The coordinator of education programs, now the associate dean, has represented San Francisco State. USF is represented by the coordinator of teacher education and the supervisor of student teachers.

The planning group which meets monthly has assiduously tried to involve all members of the collaborative in final decisions. Often, between planning group meetings, the union coordinator and a district staff member and/or university representative have met to accomplish specific tasks and then report back to the full group. There have been few areas of disagreement, and working relationships among all of the parties are smooth.

THE PROGRAM

The Selection Process

The San Francisco program is envisioned to ultimately operate on three levels:

1) Individuals with fewer than 60 college units will enroll in an A.A. program at San Francisco Community College. When this happens, a representative from the community college would become a member of the collaborative.

2) Those with 60 units or more will have an opportunity to complete a B.A. at San Francisco State or USF.

3) Those who have completed a B.A. will participate in the teacher internship program, now being developed with S.F. State and USF.

For the initial year, the planning group decided to concentrate only on Level 3. However, it became clear to all on the Para-Career Program Council that in order to recruit minorities, a longer program, beginning with 60 units or the A.A. Program, would be needed. The following process was used to determine which paraprofessionals would participate in the program in its first year of operation.

A pre-application interest survey was mailed to all San Francisco paraprofessionals. Attached to the survey was a cover letter signed by both the superintendent and the SFFT president stating that this program was a joint district-union effort.

An informational meeting was held for interested paraprofessionals with representatives of the union, school district, and both participating universities. The purpose of this meeting was to explain the program requirements to paraprofessionals. Members of the planning group wanted to be sure that paras who entered the program understood that this would not be simply an easy route to a teaching credential.

The original plan was to include 50 paraprofessionals in the program the first year. However, after a series of discussions about the need to build success into the program, especially in its first year, the planning group agreed to "scale back" the number of first-year participants to 10. There were 25 paras selected to participate in the program the second year with at least that many proposed for the third. The program needed a "carrot." What would people who participated in the program and earned teaching credentials receive for their efforts? The school district agreed to guarantee teaching jobs in San Francisco to the people who successfully complete this first year program.

Most paraprofessionals are low-income individuals who cannot afford to give up their jobs when they enter the internship program. Thus, the planning group selected the 10 program participants and saw where they were assigned as paraprofessionals. To enable them to keep their jobs, the interns were allowed to keep their paraprofessional assignment and "weave in" the student teaching assignment at the same school.

Program participants were clustered in a few schools. School sites and master/mentor teachers were jointly selected by the union and the school district.

The State of California requires that any individual interested in pursuing a teaching career, take the California

Basic Education Skills Test (CBEST) prior to being admitted to a credential program. The SFFT offered a special Pre-CBEST review class to help program participants satisfy this requirement.

Program plans included courses at San Francisco State and USF to satisfy licensing requirements for California and an intensive three-week summer training program for the interns. The bulk of the training was conducted by Teacher Research Linkers (TRLs), San Francisco teachers who have participated in the AFT's Educational Research and Dissemination program. To supplement the ER&D training which shared the latest research in effective teaching, a professor from San Francisco State provided an overview of the essentials of child development.

In addition to completing required coursework for their credentials, interns participate in bi-monthly seminars on a variety of topics. Some seminars involve formal presentations on topics such as cooperative small groups and working in the multicultural classroom by professors from S.F. State, USF and by the TRL. At other times, guest lecturers are invited. Still other seminars provide the interns with an opportunity to discuss their first year teaching experiences with each other.

As an additional program-building strategy, planning committee members meet with two groups of San Francisco teachers--10 experienced teachers and 10 probationary teachers who have just completed their first year of teaching. The purpose of these get-togethers is to solicit experienced teachers' views about the types of knowledge and training which would be most useful to the interns. Probationary teachers talk about what information, training and support they most valued or wish they had had both prior to entering the classroom and during their first year of teaching. These teachers' comments are used as suggestions for additional training and support components for the teacher interns.

Funding

Money is a continuing problem. Paraprofessionals are primarily low-income individuals, many of whom are single parents. They need to continue to receive a paycheck and most cannot afford university tuition.

The dean of the school of education at San Francisco State, the SFUSD deputy superintendent and the SFFT president met with S.F. State's provost to request fee waivers for the interns who attend USF. Although the provost was supportive of the program, he was unable to get fee waivers for them. Monies remaining from the planning grant were used to pay tuition at San Francisco State.

The University of San Francisco received a federal grant to train bilingual paraprofessionals to become bilingual teachers. USF set aside some of these grant positions for intern program participation.

New sources of funding must be sought for the program. Planning committee members intend to explore corporate and foundation funding, as well as available student scholarships.

Should the school district's financial situation improve, the union will discuss with the school district the possibility of district funds supporting some intern positions.

Issues and Barriers

Moving the paraprofessional career/teacher intern program to its current stage of development has not always been an easy or smooth task. Problems that some participants expected never materialized and sometimes unanticipated problems arose.

A sense of trust has developed from working cooperatively to solve these problems and the planning committee has become a comfortable team.

Each organization represented on the planning group has done an effective job of keeping its particular constituents informed. The deputy superintendent reports regularly to the superintendent about the intern program. The superintendent reports to the school board. The union maintains communication with paraprofessionals, including those who have applied but will not be selected for the program. The university representatives inform their education school faculties.

Funding is, and will continue to be, a problem. Considerable time will need to be devoted to securing funding to continue and expand the program.

No problems among planning group members have come to the surface in the course of developing the process for selecting program participants or agreeing upon program content.

One problem does loom on the horizon. As the program develops and expands, more staff time will be necessary to keep it functioning. Neither a full-time classroom teacher nor a central office administrator with other full-time responsibilities will be sufficient to coordinate a successful internship program. The planning committee will need to give consideration to staffing the program on at least a part-time basis.

The union and district have formed a strong, cooperative team on this project. No turf battles have materialized between these two players. The relationship with both universities has also been fine. All members of the collaborative want to build the program and have been consistently cooperative.

Accomplishments and Expectations

Planning group participants in San Francisco believe they have accomplished much with the program. The union and the school district have forged a new cooperative relationship with one another and both organizations have improved their relationships with the two key San Francisco teacher training institutions.

This program has the potential to accomplish much. For the school district, it can serve to develop a pool of qualified individuals from the ranks of paraprofessionals to fill soon-to-be-vacant teaching positions. For the union, the program can both help to upgrade the opportunities for the paraprofessionals whom it represents and expand the union's role in professional development activities. The intern program is clearly a "win-win" activity in San Francisco.

Recommendations

The following recommendations would strengthen the Paraprofessional Career Program:

1) A formal evaluation plan should be developed to assess the program and make necessary modifications.

2) Conduct a longitudinal study that follows paras from their initial participation in the program through their probationary years as a teacher. Data can be obtained indicating the effectiveness of a program that moves paraprofessionals into teaching, and a comparison can be made with other beginning teachers regarding classroom performance and attrition.

3) Funding should be actively sought to a) expand the program and offer opportunities that encourage paraprofessionals to become teachers with specialities in critical shortage areas; b) secure the current program to support tuition requirements for the paras tenure in the program; and c) to support training and programs provided by union, school district, and university.

4) Mentor teachers should receive training that will enhance their role as a supervising teacher and mentor.

5) Plans for future program development should include procedures for facilitating a smooth transition from paraprofessional to intern to teacher.

Intensive coaching is needed during the first semester of teaching.

The implementation of the planned two-year internship program cannot begin until the TRIP teachers are selected and, sadly, selection is not finalized until after the opening of school. Because the teachers are not identified early, common scheduling of TRIP periods, TRIP activities for mentors, and special activities for the TRIP teachers cannot occur or are enormously difficult to orchestrate.

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The program is in its second year of implementation. Twenty-nine out of thirty of the first group of interns has completed the initial year and their preparation continues. A second group of thirty interns have begun the program.

The most notable accomplishment is the instutionalization of the Teacher Recruitment and Internship Project in the Dade County Public Schools. When the second year of the program began, TRIP had been included in the recently negotiated collective bargaining contract between the union and the school district. The contract describes the purpose of TRIP and delineates the guidelines and procedures to be followed.

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SAN FRANCISCO

PARAPROFESSIONAL CAREER PROGRAM
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The AFT has long worked to improve the lot of paraprofessionals. Part of that improvement process includes a commitment to develop with the school district a program to help paraprofessionals who want to become teachers to earn teaching credentials. The San Francisco Unified School District's then new superintendent eagerly embraced the idea of the para-career/teacher internship program and appointed his second-in-command to be his personal representative on the planning group. This action had particular significance in San Francisco.

The San Francisco Federation of Teachers and the San Francisco Unified School District have had an historically stormy relationship. The previous superintendent made no pretense of liking the union. The union reciprocated in kind. The atmosphere with the current superintendent and the current union president is entirely different. The union and the district view the para-career/teacher internship program as one way to achieve several mutually beneficial goals: providing new career opportunities for paraprofessionals, providing the district with some of the teachers it needs, and securing a better relationship between the union and school district management. The hallmarks of this program have been the mutual cooperation between and equal partnership status of the AFT local and school district administration.

San Francisco State University is part of the 19-campus California State University System. The university has a longstanding, cooperative relationship with the school district, largely because San Francisco State places many of its student teachers in the city's public schools.

The University of San Francisco is a private, Jesuit-run institution with a growing school of education. The school's dean is eager to upgrade the image of his school and has hired a credential program director who is very enthusiastic about the para-career/teacher intern program. In addition, USF's supervisor of student teachers, who often attends planning group meetings, is a retired San Francisco teacher and a long-time member of the San Francisco Federation of Teachers. The SFUSD and USF have a longstanding, cooperative relationship. Many of the district's administrators attend USF to earn advanced degrees.

Each of the players in the collaborative sees the benefits of participating in the project. The union views the program as a way to offer new professional opportunities to the people it represents. The school district looks to the program as one mechanism to handle its inevitable teacher shortage. San Francisco State wants to maintain its positive relationship with the SFUSD and believes the university, too, may have something to learn by participating in the program. USF sees the increase in minority students in school of education as a way to enhance its image and also expand the number of minority candidates for graduation.

Process

The SFUSD and the SFFT had previously negotiated a provision in the paraprofessional contract calling for the establishment of a paraprofessional career development program, leading to a teaching credential. When San Francisco was selected as one of the sites to receive a Primerica planning grant, the president of the union approached the superintendent with the idea that the money be used for the paraprofessional program. The superintendent readily agreed. Both parties further agreed that the teacher training component of the program should be constructed as a teacher internship plan. The union then contacted San Francisco State and the University of San Francisco. Both universities initially agreed to send representatives to a preliminary planning meeting and, of course, have continued to participate in the project.

Each organization appointed one or more representatives to the planning group. In the initial year of the program, the SFFT used part of the planning grant money for a stipend for a local program coordinator. The coordinator, a full time San Francisco teacher who spent the 1985-86 school year at Stanford University as an AFT Distinguished Visiting Practitioner, has been the primary SFFT representative to the planning group. The school district initially released the teacher two days each week to coordinate the program. Now with the increased numbers of paras participating in the program, the district has released the teacher to coordinate the program full time.

The school district has been represented on the planning group by the deputy superintendent and by a personnel officer. The coordinator of education programs, now the associate dean, has represented San Francisco State. USF is represented by the coordinator of teacher education and the supervisor of student teachers.

The planning group which meets monthly has assiduously tried to involve all·members of the collaborative in final decisions. Often, between planning group meetings, the union coordinator and a district staff member and/or university representative have met to accomplish specific tasks and then report back to the full group. There have been few areas of disagreement, and working relationships among all of the parties are smooth.

THE PROGRAM

The Selection Process

The San Francisco program is envisioned to ultimately operate on three levels:

1) Individuals with fewer than 60 college units will enroll in an A.A. program at San Francisco Community College. When this happens, a representative from the community college would become a member of the collaborative.

2) Those with 60 units or more will have an opportunity to complete a B.A. at San Francisco State or USF.

3) Those who have completed a B.A. will participate in the teacher internship program, now being developed with S.F. State and USF.

For the initial year, the planning group decided to concentrate only on Level 3. However, it became clear to all on the Para-Career Program Council that in order to recruit minorities, a longer program, beginning with 60 units or the A.A. Program, would be needed. The following process was used to determine which paraprofessionals would participate in the program in its first year of operation.

A pre-application interest survey was mailed to all San Francisco paraprofessionals. Attached to the survey was a cover letter signed by both the superintendent and the SFFT president stating that this program was a joint district-union effort.

An informational meeting was held for interested paraprofessionals with representatives of the union, school district, and both participating universities. The purpose of this meeting was to explain the program requirements to paraprofessionals. Members of the planning group wanted to be sure that paras who entered the program understood that this would not be simply an easy route to a teaching credential.

The original plan was to include 50 paraprofessionals in the program the first year. However, after a series of discussions about the need to build success into the program, especially in its first year, the planning group agreed to "scale back" the number of first-year participants to 10. There were 25 paras selected to participate in the program the second year with at least that many proposed for the third. The program needed a "carrot." What would people who participated in the program and earned teaching credentials receive for their efforts? The school district agreed to guarantee teaching jobs in San Francisco to the people who successfully complete this first year program.

Most paraprofessionals are low-income individuals who cannot afford to give up their jobs when they enter the internship program. Thus, the planning group selected the 10 program participants and saw where they were assigned as paraprofessionals. To enable them to keep their jobs, the interns were allowed to keep their paraprofessional assignment and "weave in" the student teaching assignment at the same school.

Program participants were clustered in a few schools. School sites and master/mentor teachers were jointly selected by the union and the school district.

The State of California requires that any individual interested in pursuing a teaching career, take the California

Basic Education Skills Test (CBEST) prior to being admitted to a credential program. The SFFT offered a special Pre-CBEST review class to help program participants satisfy this requirement.

Program plans included courses at San Francisco State and USF to satisfy licensing requirements for California and an intensive three-week summer training program for the interns. The bulk of the training was conducted by Teacher Research Linkers (TRLs), San Francisco teachers who have participated in the AFT's Educational Research and Dissemination program. To supplement the ER&D training which shared the latest research in effective teaching, a professor from San Francisco State provided an overview of the essentials of child development.

In addition to completing required coursework for their credentials, interns participate in bi-monthly seminars on a variety of topics. Some seminars involve formal presentations on topics such as cooperative small groups and working in the multicultural classroom by professors from S.F. State, USF and by the TRL. At other times, guest lecturers are invited. Still other seminars provide the interns with an opportunity to discuss their first year teaching experiences with each other.

As an additional program-building strategy, planning committee members meet with two groups of San Francisco teachers--10 experienced teachers and 10 probationary teachers who have just completed their first year of teaching. The purpose of these get-togethers is to solicit experienced teachers' views about the types of knowledge and training which would be most useful to the interns. Probationary teachers talk about what information, training and support they most valued or wish they had had both prior to entering the classroom and during their first year of teaching. These teachers' comments are used as suggestions for additional training and support components for the teacher interns.

Funding

Money is a continuing problem. Paraprofessionals are primarily low-income individuals, many of whom are single parents. They need to continue to receive a paycheck and most cannot afford university tuition.

The dean of the school of education at San Francisco State, the SFUSD deputy superintendent and the SFFT president met with S.F. State's provost to request fee waivers for the interns who attend USF. Although the provost was supportive of the program, he was unable to get fee waivers for them. Monies remaining from the planning grant were used to pay tuition at San Francisco State.

The University of San Francisco received a federal grant to train bilingual paraprofessionals to become bilingual teachers. USF set aside some of these grant positions for intern program participation.

New sources of funding must be sought for the program. Planning committee members intend to explore corporate and foundation funding, as well as available student scholarships.

Should the school district's financial situation improve, the union will discuss with the school district the possibility of district funds supporting some intern positions.

Issues and Barriers

Moving the paraprofessional career/teacher intern program to its current stage of development has not always been an easy or smooth task. Problems that some participants expected never materialized and sometimes unanticipated problems arose.

A sense of trust has developed from working cooperatively to solve these problems and the planning committee has become a comfortable team.

Each organization represented on the planning group has done an effective job of keeping its particular constituents informed. The deputy superintendent reports regularly to the superintendent about the intern program. The superintendent reports to the school board. The union maintains communication with paraprofessionals, including those who have applied but will not be selected for the program. The university representatives inform their education school faculties.

Funding is, and will continue to be, a problem. Considerable time will need to be devoted to securing funding to continue and expand the program.

No problems among planning group members have come to the surface in the course of developing the process for selecting program participants or agreeing upon program content.

One problem does loom on the horizon. As the program develops and expands, more staff time will be necessary to keep it functioning. Neither a full-time classroom teacher nor a central office administrator with other full-time responsibilities will be sufficient to coordinate a successful internship program. The planning committee will need to give consideration to staffing the program on at least a part-time basis.

The union and district have formed a strong, cooperative team on this project. No turf battles have materialized between these two players. The relationship with both universities has also been fine. All members of the collaborative want to build the program and have been consistently cooperative.

Accomplishments and Expectations

Planning group participants in San Francisco believe they have accomplished much with the program. The union and the school district have forged a new cooperative relationship with one another and both organizations have improved their relationships with the two key San Francisco teacher training institutions.

This program has the potential to accomplish much. For the school district, it can serve to develop a pool of qualified individuals from the ranks of paraprofessionals to fill soon-to-be-vacant teaching positions. For the union, the program can both help to upgrade the opportunities for the paraprofessionals whom it represents and expand the union's role in professional development activities. The intern program is clearly a "win-win" activity in San Francisco.

Recommendations

The following recommendations would strengthen the Paraprofessional Career Program:

1) A formal evaluation plan should be developed to assess the program and make necessary modifications.

2) Conduct a longitudinal study that follows paras from their initial participation in the program through their probationary years as a teacher. Data can be obtained indicating the effectiveness of a program that moves paraprofessionals into teaching, and a comparison can be made with other beginning teachers regarding classroom performance and attrition.

3) Funding should be actively sought to a) expand the program and offer opportunities that encourage paraprofessionals to become teachers with specialities in critical shortage areas; b) secure the current program to support tuition requirements for the paras tenure in the program; and c) to support training and programs provided by union, school district, and university.

4) Mentor teachers should receive training that will enhance their role as a supervising teacher and mentor.

5) Plans for future program development should include procedures for facilitating a smooth transition from paraprofessional to intern to teacher.

The CHAIRMAN. Claiborne.

Senator PELL. You speak of a teacher shortage, and yet we hear conflicting reports. In my own State of Rhode Island, there's more a feeling that a surplus exists, and yet nationally we're worried about a shortage. What do you think the situation really is?

Dr. SHANKER. Well, shortages are always relative to standards. So if you have no standards, there's never a shortage. What you've got to ask yourself is, you've got to take a look at the least qualified teachers in your schools and ask them—least qualified who were employed last September, and ask yourself whether or not you really have a shortage after you look at those teachers.

There is not a single classroom in the United States that doesn't have some adult standing in front of the kids. But the fact is that large numbers of these adults standing in front of kids would not—not only wouldn't be employed as teachers in any other industrial country in the world, but they wouldn't be admitted to college in many places.

We're just kidding ourselves. It's like the great inflation thing. We say there's no shortage because there's somebody in every classroom. But you've got to ask yourself how are we going to change these figures on the national assessment which tells us that after 12 years of education, that only three, four, or five percent of our kids can write a good letter, read a good essay, read some materials that are worth reading, or solve a two-step arithmetic problem that goes something like: Mary Jane put $500 in a bank at nine percent simple annual interest. How much could she withdraw at the end of 1 year? Four or five percent of the kids who are still in high school and about to graduate are successful, the ones who are able to do that.

Now, how are you going to get better results than that if you don't have teachers who are really able? I suggest that this whole business of—sure, there's no shortage because there are no standards. I think the standards issue is a very important one.

Senator PELL. Good. I appreciate your thoughts on that. One other question. In connection with our proposed New Careers program. What do you think would be the key elements to make that a successful program?

Dr. SHANKER. Well, I think that there are two ends of the spectrum. One is bring in younger people, and the other is to encourage these programs for people who are retiring from business, the military, who are interested in second careers.

An interesting phenomenon, we don't quite know why it's happening yet, but large numbers of new teachers who are coming in are coming in from other careers. That is, they have decided that they prefer to teach, which is interesting.

I think essentially it is ultimately you're going to need decent salaries and conditions, but the thing you need most of all is a good preparation program, so that when they come into the classroom we don't lose them because they feel they can't cope with the problems. I think you need a very good preparation program. I think that one of the key elements of any preparation program needs to be actual experience in schools with kids. There need to be programs which involve colleges, universities, teacher training programs, but they can't all be classroom activities that are book learning and theoretical. I'm all in favor of that. We need people to understand what they're doing and who are capable of reading literature and understanding research. But part of that has to be equivalent to a medical internship. I think that more than anything else would ensure the success of people who are prepared for the program.

Senator PELL. Thank you very much, indeed.

The CHAIRMAN. Dr. Shanker, we'll excuse you. Thank you very much.

Dr. SHANKER. Thank you.

The CHAIRMAN. We'll look forward to your additional comments. Dr. Mishel, we'll be delighted to hear from you.

Dr. MISHEL. Mr. Chairman, in our testimony, we submitted a copy of our recent report called "Shortchanging Education." We also submitted the critique of our report by the U.S. Department of Education and our response to the Department of Education.

Today, I have some brief remarks prepared. First, I want to thank you for the opportunity to share the findings of our recent research on cross-country comparisons of education spending. This research is part of a larger Economic Policy Institute research agenda on public investment that is funded by the Ford Foundation.

It is our belief that there is a third deficit—what we call the deficit in public investment in physical and human capital—that is as critical to our future as the fiscal and trade deficits.

The CHAIRMAN. Bring that mike in front of you a little bit more please. Thank you.

Dr. MISHEL. As I was saying, we think that there is a third deficit, in addition to the fiscal and trade deficits, that is very critical to our future. It's the deficit in public investment in physical and human capital.

We are not alone in this belief. Last spring, over 300 economists, including six Nobel prize winners, signed a statement calling attention to this public investment deficit. Of course, education is one of the central items of any public investment agenda, since improving the quantity and quality of the education of the work force provides large economic payoffs, as well as critical noneconomic benefits.

In following the events around the education summit, we were struck by the chorus of administration officials claiming that we could adequately reform the education system without spending any more money on education. The basis for these statements was always that the U.S. spends more than other countries on education but gets inferior results. For instance, President Bush has said that the U.S. "lavishes unsurpassed resources on our children's school." So "our focus must no longer be on resources; it must be on results."

Roger Porter, the White House domestic policy adviser, has said that the U.S. spending on education is "more per capita, more per student. It is more as a share of our gross national product than other countries."

Our natural curiosity led us to examine the empirical support for these statements. Our conclusion, as I will discuss in more detail later, is that the U.S. spends relatively less than other industrial countries on education. Such comparative research cannot tell us whether or by how much education spending should be increased. But our research does suggest that discussions of a school reform agenda should not be artificially restricted to cost-free items because of any claims that the U.S. spends much more than other countries. Rather, we believe that there are important things that can be done without greater spending, but that many important initiatives will require greater spending on education. Each item in a school reform agenda should be considered on its merits rather than be subject to a "no new resources" litmus test based on misleading analyses of comparative spending levels across countries.

Now, turning to our research, we examined education expenditures in 16 industrialized countries and adjusted these expenditures for differences in national incomes. Our results are as follows:

One, the U.S. does spend comparatively more than other countries on higher education. This reflects the fact that a much larger proportion of our population is enrolled in colleges and universities. In fact, our college enrollment rate is at least double that of other countries. As a result, when one compares all education spending, including both colleges and K–12, it is true that the U.S. spends more on education than other countries.

But looking at all education levels is very misleading. As the chart on the left shows, people frequently refer to the performance of students in various countries, and then compare it to education spending comparisons by country. Well, it turns out that these results of student performance reflects the performance levels of 13-year-olds or 14-year-olds, eighth graders. And it seems unrealistic to us to expect that because we spend a lot on college that we would have good performance by our 13-year-olds. As a result, we believe that one should focus on the education spending at the K-12 level.

Our current policy concern is the performance of students graduating high school and not on the quality of our colleges. When we limit our comparison of education spending to the K-12 level, we find that the U.S. spends less than most every other country, and, by our count, the U.S. spending ranks 14th of the 16 countries we examined. Perhaps even more pessimistically, between 1980 and 1985, the U.S. ranking fell from 12th to 14th.

If the U.S. were to increase spending for primary and secondary schools up to just the average level found in the other countries, we would need to raise spending by over $20 billion annually.

Our last finding is that the U.S. has been increasing education spending far more slowly in the 1980's than in the 1970's. Whatever increases have occurred are due to greater State and local spending efforts and in spite of reduced Federal funding.

Again, thank you for the opportunity to appear before the committee. We would be glad to answer any questions you might have.

[The prepared statement of Dr. Mishel follows:]

Economic Policy Institute

1730 RHODE ISLAND AVENUE, NW • SUITE 812 • WASHINGTON, DC 20036 • 202/775-8810

"U.S. Education Spending in Comparative Perspective"

Lawrence Mishel

M. Edith Rasell

of the

Economic Policy Institute

Testimony before the Senate Committee on Labor and Human Resources hearing on

"Teacher Excellence: Recruitment and Training"

January 30, 1990

Attachments:

1. **"Shortchanging Education: How U.S. Spending on Grades K-12 Lags behind other Industrial Nations"**
   by M. Edith Rasell and Lawrence Mishel
2. **"Shortchanging Education: A Case Study in Flawed Economics"**
   by the U.S. Department of Education
3. **"Measuring Comparative Education Spending: A Response to the Department of Education"**
   by M. Edith Rasell and Lawrence Mishel

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SHORTCHANGING EDUCATION

HOW U.S. SPENDING ON GRADES K-12 LAGS BEHIND OTHER INDUSTRIAL NATIONS

By M. Edith Rasell and Lawrence Mishel

Introduction and Summary

Over the past decade, Americans have become increasingly concerned about the educational and academic achievements of U.S. students, particularly at the primary and secondary levels. Numerous high-level commissions, composed of leaders from government, education, and business, have examined the schools, and most recently, state governors and Administration officials, including President Bush, met at the "Education Summit" to discuss needed reforms. Improving the education of U.S. students has risen to the top of the public agenda.

President Bush, who has declared his desire to be known as the "education president," has, however, attempted to limit the discussion of educational reform initiatives to those which do not involve spending additional public funds. At the "Education Summit" in September, President Bush declared that the U.S. "lavishes unsurpassed resources on [our children's] schooling." Therefore, "our focus must no longer be on resources. It must be on results."[1] At this same conference, Secretary of Education Lauro Cavazos stated that the problem with U.S. education "is not ... an issue of dollars... [F]unding is truly not an issue."[2]

The President and Administration officials have justified this anti-spending stance by asserting that the U.S. education system is already well-funded in comparison with other industrialized nations. Two measures of spending have been used by Administration officials and others to compare U.S. expenditures with those of other countries. One measure is spending per pupil. According to Secretary of Education Cavazos, "we are already spending more money per student than our major foreign competitors, Japan and Germany."[3] President Bush's Chairman of the Council of Economic Advisers, Michael J. Boskin, agrees: "[w]e spend more, per pupil, than most of the other major industrialized economies."[4] In *The New York Times*, Chester E. Finn, Jr., former Assistant Secretary of Education in the Reagan Administration and now director of the Educational Excellence Network of Vanderbilt University, wrote: "[w]e already spend far more per pupil than any other nation."[5]

The second measure of spending which is used to make international comparisons is the share of national income devoted to education. In an appearance on the NBC "Today Show" just before the September 1989 "Education Summit," President Bush's Chief of Staff John Sununu declared: "[w]e spend twice as much [on education] as the Japanese and almost 40 percent more than all of the other major industrialized countries of the world."[6] The Council of Economic Advisors chairman Michael Boskin stated, "we spend a very large amount of our national income on education."[7]

The Administration's proposition that U.S. education is well-funded and therefore poor student performance cannot be a matter of insufficient monies is a key element in the national debate over education. It has provided policymakers at federal, state, and local levels a convenient rationale for not devoting more resources to education in a time of budgetary stress.

This paper is an examination of the statistical under-pinnings of the Administration's claims. It concludes that the assertions about funding are misleading and therefore are invalid guides to education policy. Specifically, our examination of education expenditures in 16 industrialized countries, adjusted for differences in national income, shows:

*** U.S. public and private spending on pre-primary, primary and secondary education, the levels of schooling which have been the focus of most concern, is lower than in most other countries. The U.S. ties for twelfth place among 16 industrialized nations, spending less than all but three countries.

*** When expenditures for K-12 are further adjusted to reflect differences in enrollment rates, the U.S. falls to fourteenth place, spending less than all the other countries but two.

*** When U.S. *public* spending alone is compared to *public* spending abroad, we rank fourteenth in spending for *all* levels of schooling, fourteenth in spending on K-12, and thirteenth in K-12 spending adjusted for enrollments.

*** If the U.S. were to increase spending for primary and secondary school up to the *average* level found in the other 15 countries, we would need to raise spending by over $20 billion annually.

*** Because the U.S. spends comparatively more than other countries on higher education, when expenditures on all levels of education -- pre-primary, primary, secondary and post-secondary -- are calculated, we are in a three-way tie for second place among the countries studied.

This paper is focused on education spending. It is not a prescription for improving the U.S. education system. We recognize that money does not guarantee excellence and we suspect that other changes -- in curriculum, in the status of teachers, and in expectations about students, to name just a few, will also be fundamental to any improvement in education quality and student achievement. But to begin a process of education reform by denying the need to increase spending, especially when U.S. schools are under-funded compared to those in other industrialized countries, places a severely limiting constraint on any plans for educational improvement.

Comparing Educational Effort

This paper compares education spending in 16 industrialized countries: most of western Europe, Canada, Japan and the U.S.[8] Our data source is the United Nations Educational, Scientific and Cultural Organization (UNESCO)[9], virtually the only commonly accepted source for such comparisons and the same source used by Administration officials. U.S. 1985 expenditure data come from the *Digest of Education Statistics*[10] (see Appendix A for details).

International Comparisons: Education Share of National Income

We will begin our study by comparing education expenditures expressed as a percentage of national income (Gross Domestic Product). This is a common method used for international comparisons which allows us to avoid the distortions caused by fluctuating exchange rates. Also, education expenditures expressed as a percentage of national income provide a measure of the national effort which each country directs toward education.

Table 1 shows education expenditures as a percentage of national income for 16 countries in 1985, the last year for which such data are available (tables appear beginning on page 11). A first but, as we will show later, misleading glance shows that U.S. spending on all levels of schooling, including pre-school, primary, secondary and higher education, in 1985 amounted to 6.8 percent of national income. This places the U.S. in a three-way tie for second place with one of the highest expenditure levels among the 16 countries studied. By this measure it appears that only Sweden spends a larger share of national income on education than does the U.S., and Canada and the Netherlands spend equivalent amounts. This figure showing the U.S. to spend a relatively large percentage of national income on education is the basis for the claims made by the President and others that the U.S. spends "lavishly" on education and that we spend more than most other countries.

This comparatively high expenditure on education is due, in large part, to the substantial sums the U.S. spends on *higher* education. A relatively larger number of U.S. students are enrolled in post-secondary education than in most other countries. In 1985, 5.1 percent of the entire U.S. population was enrolled in some form of higher education, a figure two to three times larger than the percentage enrollments of any other country, except Canada (see Table 2). Larger enrollments, in what is also a more expensive form of education, raise U.S. total education expenditures above levels in many other countries.

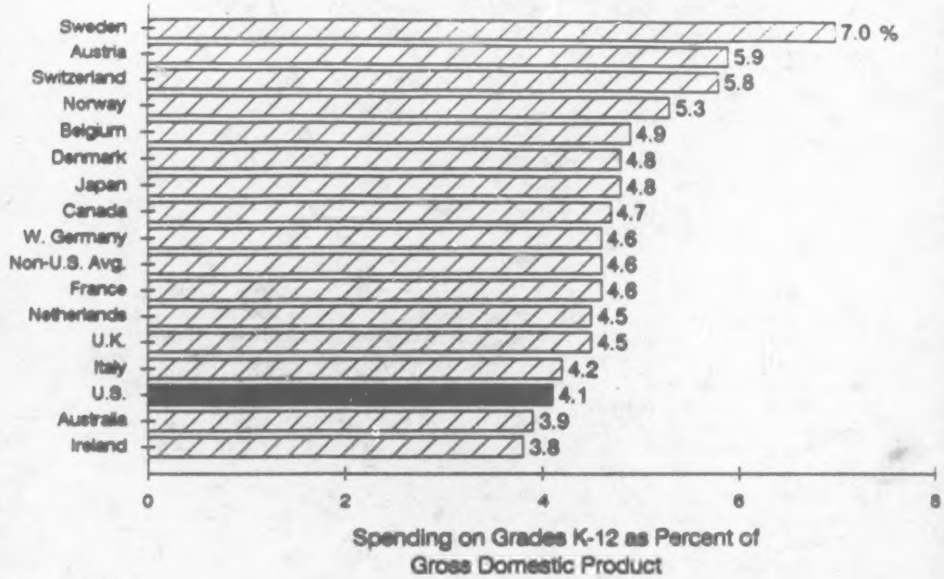
But the current crisis of American schools is not in higher education: it is in the primary and secondary school systems. A comparison of funding for *all* levels of education combined thus obscures the main focus of concern about American education. If spending on K-12 only is compared, as shown in column 2 of Table 1, in 1985 the U.S. tied for twelfth place, spending *less* than 11 of the other countries. Only three of the countries studied spent less than the U.S. on primary and secondary education.[11]

But this picture of relative spending is still incomplete. Calculations of funding adequacy must also be related to the size of the school age population in each country. Among the countries studied, the U.S. enrolls a relatively large percentage of the population in pre-primary, primary and secondary school (see Table 2). For example, over 19 percent of the U.S. population is enrolled in K-12, but less than 15 percent of the West German population and only 14 percent of the population in Switzerland. In Table 1, column 3, the K-12 expenditure figures of column 2 are adjusted to take into account the relative size of each country's K-12 enrollment (see Appendix A for methodology). By this more accurate calculation, among the 16 countries studied, *the U.S. spends less on pre-primary, primary and secondary education than all but two other countries.* Only Australia and Ireland spend less than the U.S. for the critically important grades K-12 (see Figure 1).

We can also compare U.S. education spending as a share of national income with the *average* share of the other 15 countries as shown in the bottom row of Table 1. The U.S. spent 4.1 percent of its national income on K-12 education in 1985, while the average abroad was 4.6 percent. If the U.S. were to have reached this average in 1985, we would have needed to raise spending for pre-primary, primary, and secondary school by over 12 percent, or by $20.6 billion annually. In 1988 dollars, the equivalent sum is $23.5 billion.

All the international comparisons made thus far still give an incomplete picture of comparative education spending. Large U.S., Japanese and German trade imbalances skew the data and make the U.S. education expenditure appear larger than is actually the case. A more accurate picture of education spending, taking into account trade imbalances, would lower U.S. spending and raise Japanese and German spending beyond the levels shown in Table 1. Further details and data appear in Appendix B.

Figure 1
Comparison of Country Education Expenditures, 1985



Source: Table 1.

Operating and Capital Expenditures

The rankings described above are derived from comparisons of education spending which include both operating expenses and capital expenditures. In order to judge whether the low U.S. rankings might be a result of some unique allocation of spending between capital and operating accounts, Table 3 ranks the 16 nations according to operating expenditures only. The comparison shows the U.S. position, relative to the other countries, to be nearly unchanged.

Public Spending on Education Compared

We have seen that the U.S. spends a smaller share of its national resources on K-12 than do most other industrialized countries. But there is another dimension in which the characterization of the U.S. as a big spender on education is wrong -- *public expenditures.*

For most of the 16 countries studied, UNESCO assembles data on *public* expenditures for education because public revenues provide virtually all of the money spent on education. Even in countries where a sizable segment of the school population is enrolled in private school, most private schools' expenses are paid with public money. Thus, public expenditures approximate total education spending. The two exceptions are Japan and the U.S. where 20-25 percent of all education funding comes from private sources. For these two countries, UNESCO provides data on public *and* private education expenditures.

Education policy is primarily, although not exclusively, concerned with public schools. Moreover, public education spending reflects the conscious national commitment to educating the next generation. It is therefore useful to compare levels of public spending in the U.S. and Japan, with public spending in the other 14 countries.

As Table 4 shows, when public spending abroad for all levels of education is compared with public spending in the U.S., the U.S. no longer ties for second place, but falls to fourteenth. Japanese public spending on all levels of education was 5.1 percent of national income, compared with 5.0 percent for the U.S. In a comparison of public funding for K-12 only, the U.S. falls from the already low ranking of 12 (when both public and private money is included), to number 14. If we educated public and private K-12 students at the actual per pupil expenditure rate found in public schools, this would increase spending and raise the U.S. ranking from 14 to 13.[12]

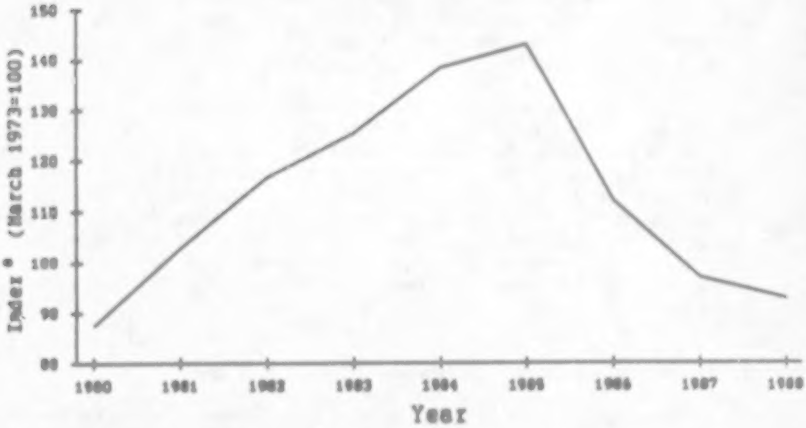
International Comparisons: Expenditures per Pupil

Thus far we have focused on education's share of national income in different countries. Education investment can also be analyzed by comparing expenditures per pupil. As we have seen, this is the measure Messrs. Cavazos, Boskin, and Finn have sometimes used to claim that the U.S. spends more on education than its economic competitors.

However, there are two potential sources of error in the use of per pupil expenditures to compare nations' spending on education. The first is the instability of exchange rates. Before cross-national comparisons can be made, expenditures measured in each country's national currency must be expressed in some common unit of measurement, e.g. dollars, yen, marks, etc. But whatever measure one chooses, it requires converting data collected in all other currencies to one currency.[13] However, exchange rates fluctuate, sometimes markedly, and this has been particularly true in the 1980s. For instance, in 1985, if $100,000 would have purchased a German school bus, by 1988, due to a decline in the value of the dollar, the same bus would have cost $166,000. If exchange rates were used to convert German expenditures into dollars, the purchase of the bus by a German school district in 1985 would have been shown as an expenditure of

$100,000, while the same purchase in 1988 would appear as an expenditure of $166,000. The size of the German expenditure measured in German marks would be unchanged, but fluctuations in the exchange rate used to convert marks to dollars would markedly change the dollar value of the expenditure. In 1985, the year which we have been examining, the dollar was particularly overvalued (see Figure 2). The effect is to make the U.S. expenditures on education appear relatively greater than those in other countries.

Figure 2
Value of the Dollar, 1980-88



a. Nominal multilateral trade-weighted value of the U.S. dollar.

Source: Federal Reserve Board.

The problem of using exchange rates to make spending comparisons is illustrated in Table 5. Using 1985 exchange rates, as shown in column 1, the U.S. ranked fourth among the 16 countries studied. But if some other value of the dollar is used to make the conversion, e.g., the 1988 exchange rate, then the U.S. ranking changes to ninth (column 2).

The second problem in using per pupil expenditures is that they do not necessarily reflect the national effort devoted to education. The real issue underlying cross-national comparisons is not the numbers of dollars or pounds which each country spends, but the relative national effort devoted to education. For example, a poorer country could spend a relatively large share of national income on education, i.e., could make a large national effort to educate its youth, but have a much lower spending per pupil than a richer country devoting a smaller share of its income to education. Before meaningful international comparisons can be made, education expenditure levels must be related to some measure of total national income.

Moreover, countries with high per capita incomes will also have higher wages reflecting a higher standard of living. For example, high living standards in the U.S. mean that, in general, workers are better paid than in other countries. Therefore, we would expect education expenditures per pupil to be higher in the U.S. than in other countries.

Per pupil expenditures can be used to make international comparisons if two conditions are met: exchange rates are avoided, and if some measure of national income is included in the calculation. Such a measure is shown in Table 6. Expenditures per student are expressed as a percentage of per capita income measured in each nation's *own* currency. We find that of the 16 countries studied, U.S. spending on pre-primary, primary, and secondary education is lower than in all but two other countries.[14]

The Historical Record

The study thus far has examined expenditures at a single point in time, 1985, and has found that the U.S. spent relatively little on pre-primary, primary, and secondary education compared with other industrialized countries. Another important issue is how U.S. funding for education has changed over time and how U.S. spending has changed relative to that of other countries. Tables 7 and 8 show U.S. funding of K-12 education in the postwar period. Expenditures are expressed as a percentage of national income.

As shown in Table 7, expenditures for pre-primary, primary and secondary education peaked in 1974, and have fallen steadily since (see column 1). Thus, spending for education has not kept pace with overall economic growth. Over this same period, however, enrollments also have fallen (see column 3). Primary and secondary school enrollment, as a percentage of the total population, was at its highest level in 1969, and has been gradually falling since that time. Adjusting expenditure figures for the changing enrollments, using the same method as in the international comparisons, shows that the decline in spending for education has been more than offset by shrinking enrollments (see Table 7, column 2). In the 1980s, the declining fraction of the population enrolled in school has meant adjusted expenditures have risen, despite the slowdown in actual funding for education.

Table 8 shows how the funding sources for public education have changed over time. Adjusted federal revenues, after rising until 1980, by 1985 had fallen by .08 percent of national income. In the same five year period, state and local revenues rose by .14 percent and .08 percent, respectively. (Since these are percentages of our two to three billion dollar national income, these small changes of less than one percent actually indicate billion dollar variations in education expenditures. In 1988, 0.1 percent of national income equaled $4.46 billion.) Thus, the federal government's education funding responsibilities were shifted onto states and localities. The observed rise in adjusted total revenue is solely due to increased funding by states and localities. Among other consequences, this has increased the potential for greater disparities in funding between school districts across the nation.

Despite the increase in overall U.S. education funding of K-12 between 1980 and 1985, our position relative to other countries declined. Table 9 shows K-12 expenditures in 1980 and 1985 for the 16 countries we have been comparing, with both years' expenditures adjusted for the 1985 U.S. enrollment rate. In 1980 the U.S. ranked twelfth in adjusted spending on K-12, spending less than eleven other countries. But by 1985, the U.S. had fallen in rank to number fourteen.

U.S. education expenditures since 1985 are shown in Table 10.[18] Spending for pre-primary, primary, and secondary education, expressed as a percentage of national income and adjusted for 1985 enrollments, rose from 3.88 percent in 1980, to 4.08 percent in 1985, reached 4.21 percent in 1987, and has been relatively constant between 1987 and 1989. Because comparable international data are not available, we cannot determine how this post-1985 U.S. trend affects its relative ranking with the other countries.

Conclusion

We have seen that when public plus private spending on all levels of education is compared with spending in other industrialized countries, the U.S. is in a three-way tie for second place among the countries studied. However, when spending for primary and secondary education alone is compared with expenditures abroad, the U.S. ranking falls to a tie for twelfth place. And when adjustments are made for enrollment size, the U.S. falls further to fourteenth place, spending less than all the other countries except two.

When levels of public spending on education only are compared, showing the social commitment to public education, again the U.S. compares unfavorably with the other countries. Comparisons of public spending for all levels of education, and for K-12 alone, both place the U.S. in fourteenth place. In enrollment adjusted K-12 public expenditures, the U.S. does slightly better, ranking number thirteenth. But by all comparisons, the U.S. devotes fewer resources to primary and secondary education than do most industrialized nations.

The claim that the U.S. spends more than other nations on education is misleading. By all comparisons, the U.S. devotes a smaller share of its resources to pre-primary, primary and secondary education than do most industrialized countries.

The comparatively weak U.S. investment in K-12 is not a result of a more efficient administrative structure or favorable demographics. In fact, the U.S. might be expected to spend proportionally *more* than other countries because of the particular characteristics of the U.S. school system and American society. Our decentralized school system gives more local autonomy and local choice, but is also more expensive than a single, centrally administered system. Our population is more heterogeneous than in most other countries. Some immigrants do not speak English. Students come from a variety of cultural backgrounds. The very high number of children living in poverty makes additional demands on the school system.

Available data do not permit cross-country comparisons to be made in much more detail, but other evidence suggests that the spending gap is particularly wide between the youngest American and foreign children. For example, it is generally accepted that the U.S. Head Start Program of early childhood education for disadvantaged children age three to five is valuable and cost effective, yet limited federal funding permits only 20 percent of eligible children to take part. Many of our competitors seem to have a stronger commitment to early childhood education, and some of them have nearly universal pre-kindergarten enrollments. In France, 100 percent of four- and five-year-olds attend school/educational day care, 90 percent of three-year-olds attend, and 36 percent of two-year-olds. In Belgium, 96 percent of three- to six-year-olds are in school, and in the Netherlands, 98 percent of four- and five-year-olds.[16]

Spending more money is not, of course, the only answer to the difficult problem of revitalizing primary and secondary education in the U.S. But the data presented here indicate that in education, as in every other service, we may "get what we pay for." Given the level of investment in our pre-primary, primary, and secondary schools, it is not surprising that we are slipping behind in comparative measures of performance as well.

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TABLE 1: COMPARISON OF INDUSTRIALIZED COUNTRY EXPENDITURES FOR EDUCATION, 1985

	EXPENDITURES /GDP RANK					
	(1) K-12 and Higher Education		(2) K-12 Only		(3) Adjusted[a] K-12	
Country						
United States	6.8%	2	4.1%	12	4.1%	14
Australia	5.5	12	3.7	15	3.9	15
Austria	5.8	11	4.7	7	5.9	2
Belgium	6.1	7	4.9	5	4.9	5
Canada	6.8	2	4.7	7	4.7	8
Denmark	6.0	8	4.5	10	4.8	6
France[b]	5.9	10	5.1	3	4.6	9
Germany, West	4.6	16	3.5	16	4.6	9
Ireland[b]	6.0	8	5.0	4	3.8	16
Italy[c]	4.8	15	4.1	12	4.2	13
Japan	6.5	5	4.8	6	4.8	6
Netherlands[b]	6.8	2	4.7	7	4.5	11
Norway	6.3	6	5.4	2	5.3	4
Sweden	7.6	1	6.3	1	7.0	1
Switzerland	5.1	14	4.2	11	5.8	3
United Kingdom[b]	5.2	13	3.9	14	4.5	11
Non-U.S. Average	5.8		4.5		4.6	

[a] Adjusted for the 1985 U.S. K-12 enrollment rate
[b] 1984 data
[c] 1983 data

Sources: UNESCO; Statistical Yearbook, 1988.
National Center for Education Statistics, U.S. Department of Education; Digest of Education Statistics, 1988.

TABLE 2: COMPARISONS OF PERCENTAGE ENROLLMENTS, 1985

Country	ENROLLMENT/TOTAL POPULATION Higher Education	K-12
United States	5.1%	19.7%
Australia	2.3	18.8
Austria	2.4	15.8
Belgium	2.6	19.8
Canada	4.9	19.6
Denmark	2.3	18.5
France[a]	2.3	21.8
Germany, West	2.5	14.9
Ireland[a]	1.9	25.6
Italy[b]	2.0	19.5
Japan	1.9	20.1
Netherlands[a]	2.7	20.4
Norway	2.1	19.8
Sweden	2.6	18.0
Switzerland	1.7	14.0
United Kingdom[a]	1.8	17.1

[a] 1984 data
[b] 1983 data

Sources: UNESCO; _Statistical Yearbook_, 1988.
National Center for Educations Statistics, U.S. Department of Education; _Digest of Education Statistics_, 1988.

TABLE 3: COMPARISON OF INDUSTRIALIZED COUNTRY OPERATING EXPENDITURES FOR EDUCATION, 1985

	EXPENDITURES /GDP	RANK				
	(1) K-12 and Higher Education		(2) K-12 Only		(3) Adjusted[a] K-12	
Country						
United States	6.2%	3	3.8%	10	3.8%	13
Australia	5.0	11	3.4	15	3.5	15
Austria	5.3	10	4.2	8	5.3	2
Belgium	5.8	5	4.7	3	4.7	4
Canada	6.4	2	4.4	6	4.4	7
Denmark	5.8	5	4.3	7	4.6	6
France[b]	5.6	7	4.8	2	4.3	8
Germany, West	4.1	16	3.2	16	4.2	10
Ireland[b]	5.5	9	4.5	5	3.5	15
Italy[c]	4.4	15	3.8	10	3.9	12
Japan	4.8	13	3.6	14	3.6	14
Netherlands[b]	6.0	4	4.1	9	4.0	11
Norway	5.6	7	4.7	3	4.7	4
Sweden	6.7	1	5.6	1	6.2	1
Switzerland	4.7	14	3.8	10	5.3	2
United Kingdom[b]	5.0	11	3.7	13	4.3	8
Non-US Average	5.1		3.9		4.1	

[a] Adjusted for the 1985 U.S. K-12 enrollment rate
[b] 1984 data
[c] 1983 data

Sources: UNESCO; *Statistical Yearbook*, 1988.
National Center for Education Statistics, U.S. Department of Education; *Digest of Education Statistics*, 1988.

TABLE 4: JAPAN AND THE UNITED STATES: PUBLIC AND PRIVATE EDUCATION EXPENDITURES, 1985

	EXPENDITURES/GDP (rank)		
	K-12 and Higher Education	K-12 Only	Adjusted[a] K-12
United States			
Public and Private	6.8% (2)	4.1% (12)	4.1% (14)
Public only	5.0 (14)	3.8 (14)	4.3[b] (13)
Japan			
Public and Private	6.5% (5)	4.8% (6)	4.8% (6)
Public only	5.1 (13)	NA.	NA.

[a] Adjusted for the 1985 U.S. K-12 enrollment rate (public plus private)

[b] The 1985 U.S. K-12 public enrollment rate is adjusted for the 1985 U.S. K-12 public plus private enrollment rate

NA = not available

Source: UNESCO; Statistical Yearbook, 1988.
National Center for Education Statistics, U.S. Department of Education; Digest of Education Statistics, 1988.

TABLE 5: COMPARISON OF K-12 1985 EXPENDITURES PER PUPIL IN INDUSTRIALIZED COUNTRIES

	Converted to Dollars Using:			
	1985 EXCHANGE RATES		1988 EXCHANGE RATES	
Country	Expenditures Per Pupil	Rank	Expenditures Per Pupil	Rank
United States	$3,456	4	$3,456	9
Australia	2,040	11	2,291	14
Austria	2,564	8	4,297	6
Belgium	2,015	12	3,254	10
Canada	3,322	5	3,683	8
Denmark	2,802	6	4,410	5
France[a]	2,051	10	3,094	12
Germany, West	2,395	9	4,016	7
Ireland[a]	956	16	1,380	16
Italy[b]	1,233	15	1,809	15
Japan	2,647	7	4,927	4
Netherlands[a]	1,919	13	3,224	11
Norway	3,792	3	5,002	3
Sweden	4,224	1	5,932	2
Switzerland	4,205	2	7,061	1
United Kingdom[a]	1,668	14	2,314	13

[a] 1984 data
[b] 1983 data

Sources: UNESCO; _Statistical Yearbook_, 1988.
National Center for Education Statistics, U.S. Department of Education; _Digest of Education Statistics_, 1988.

TABLE 6: COMPARISON OF INDUSTRIALIZED COUNTRY K-12 EXPENDITURES PER PUPIL AS A PERCENT OF PER CAPITA INCOME, 1985

Country	Percent	Rank
United States	20.8%	14
Australia	19.5	15
Austria	29.7	2
Belgium	25.0	5
Canada	24.0	8
Denmark	24.5	6
France[a]	23.2	10
Germany, West	23.5	9
Ireland[a]	19.4	16
Italy[b]	21.1	13
Japan	24.1	7
Netherlands[a]	23.0	11
Norway	27.1	4
Sweden	35.3	1
Switzerland	29.6	3
United Kingdom[a]	22.8	12
Non-U.S. Average	23.5	

[a] 1984 data
[b] 1983 data

Sources: UNESCO; Statistical Yearbook, 1988.
National Center for Education Statistics, U.S. Department of Education; Digest of Education Statistics, 1988.

TABLE 7: UNITED STATES K-12 EXPENDITURES, 1949-1985

	EXPENDITURES/GDP		
	(1)	(2)	(3)
Year	Total	Adjusted* Total	Enrollment as % of Population
1949	2.41%	2.38%	19.08%
1959	3.39	2.78	22.98
1965	4.01	3.03	24.95
1969	4.51	3.37	25.22
1972	4.57	3.56	24.18
1974	4.74	3.81	23.41
1976	4.50	3.73	22.70
1978	4.19	3.69	21.40
1980	4.18	3.88	20.34
1982	4.13	4.00	19.46
1984	4.01	3.98	18.98
1985	4.08	4.08	18.83

* Adjusted to the 1985 K-12 enrollment rate.

Note: These 1980 and 1985 adjusted expenditures differ from those shown in Tables 1 and 9. See endnote 15 for an explanation.

Source: National Center for Education Statistics, U.S. Department of Education; Digest of Education Statistics, 1988.

TABLE 8: SOURCE OF PUBLIC REVENUES FOR UNITED STATES PUBLIC K-12, 1949-1985

Year	ADJUSTED[a] REVENUES/GDP (1) Federal	 (2) State	 (3) Local
1949	.06%	.82%	1.18%
1959	.11	.98	1.41
1965	.22	1.08	1.46
1969	.25	1.23	1.61
1972	.29	1.31	1.69
1974	.31	1.47	1.69
1976	.31	1.51	1.66
1978	.33	1.56	1.53
1980	.33	1.72	1.57
1982	.26	1.75	1.64
1984	.24	1.80	1.63
1985	.25	1.86	1.65
Change 1980-1985	-.08	2·3 +.14	+.08

[a] Adjusted to the 1985 K-12 enrollment rate.

Source: National Center for Education Statistics, U.S. Department of Education; Digest of Education Statistics, 1988.

TABLE 9: COMPARISON OF INDUSTRIALIZED COUNTRY 1980 AND 1985 EXPENDITURES FOR EDUCATION

	Total K-12 Expenditures/GDP			Rank
Country	1980[a]		1985[a]	
United States	4.1%	12	4.1%	14
Australia	4.0	13	3.9	15
Austria	5.3	4	5.9	2
Belgium	4.6	9	4.9	5
Canada	4.9	7	4.7	8
Denmark	5.5	3	4.8	6
France[b]	3.8	15	4.6	9
Germany, West	4.4	10	4.6	9
Ireland[b]	4.0	14	3.8	16
Italy[c]	3.8	16	4.2	13
Japan	5.3	4	4.8	6
Netherlands[b]	4.8	8	4.5	11
Norway	5.7	2	5.3	4
Sweden	8.5	1	7.0	1
Switzerland	5.1	6	5.8	3
United Kingdom[b]	4.4	10	4.5	11
Non-U.S. Average	4.6		4.6	

[a] Adjusted for 1985 U.S. K-12 enrollment

[b] Data listed for 1985 is actually 1984

[c] Data listed for 1985 is actually 1983; data listed for 1980 is actually 1979.

Sources: UNESCO; Statistical Yearbook, 1988.
NCES, U.S. Department of Education; Digest of Education Statistics, 1988.

TABLE 10: UNITED STATES K-12 EXPENDITURES, 1980-1989

Year	Expenditures/GDP[b]
1980	3.88%
1982	4.00
1985	4.08
1986	4.19
1987[a]	4.21
1988[a]	4.20
1989[a]	4.22

[a] Estimate
[b] Adjusted for the 1985 K-12 enrollment rate

Source: National Center for Education Statistics, U.S. Department of Education; Digest of Educational Statistics, 1988, and 1989 (forthcoming).

APPENDIX A: METHODOLOGY FOR COMPARING EXPENDITURES

The purpose of this paper is to compare education expenditures, in particular for pre-primary, primary and secondary education, among industrialized countries. The only source of education expenditure data for multiple countries is the UNESCO *Statistical Yearbook*. Data from 1985 and 1980 were examined. 1985 is the most recent year for which data are available for most countries, and 1980 was chosen arbitrarily as a starting point from which to estimate trends.

The 1988 *Yearbook* provides the enrollment and expenditure data for all countries in this report, with the exception of the U.S. 1985 expenditure. Since UNESCO lists no U.S. education expenditure figures for years since 1983, these figures were obtained from the U.S. Department of Education's 1988 *Digest of Education Statistics*. A question immediately arises concerning the comparability of the U.S. and UNESCO data. Examination of total education expenditure figures for 1982 and 1983, the most recent years for which both UNESCO and *Digest* data are available, shows that the numbers correspond quite closely. In 1982, UNESCO's figure was 1.5 percent greater than the *Digest's*, and in 1983, the *Digest's* was .93 percent larger than UNESCO's.

Public and Private Expenditures

For all countries except the U.S. and Japan, UNESCO provides data on *public* spending for education which includes nearly all education expenditures. In the U.S., about 25 percent of all education spending is private money which is spent primarily for higher education. The UNESCO figures given for the U.S. are for combined public and private spending. In Japan, approximately 20 percent of all education spending is private and it is also biased toward higher education. Since 1984, the UNESCO figures for Japan include both public and private expenditures. Our calculation of 1980 public *and* private Japanese education spending is explained below.

Spending for Pre-Primary, Primary, and Secondary Education

Our primary goal is to compare K-12 spending among industrialized countries. Unfortunately, UNESCO does not disaggregate total expenditures into spending for K-12 and higher education, but this information can be calculated from the data given. (In this paper, when the expression K-12 is used, "K" represents all the pre-primary years.) UNESCO divides total education spending into current (operating expenses) and capital expenditures and provides the distribution of *current* expenditures between K-12 and higher education. However, data on capital expenditures are not available by level of schooling. It is therefore necessary to estimate total spending on K-12 by making assumptions about the distribution of capital spending between K-12 and higher education. (For most countries, capital spending is less than ten percent of total spending.)

First, the ratio of current spending on K-12 to current spending on both K-12 and higher education is determined. This ratio is then applied to total capital expenditures to estimate capital spending for K-12. The estimated K-12 capital spending is added to K-12 current spending to give a preliminary figure for K-12 expenditures. (Other additions to this amount are described below.) This method assumes that capital spending is apportioned between K-12 and higher education exactly as is current spending. Although this assumption is probably not strictly accurate (see below), it affects the calculation of every country's expenditures (by a very small amount), and so will not bias our results toward any particular country. The comparison of K-12 operating expenses (current expenditures) shown in Table 4 yields essentially the same rankings as our comparison of total K-12 spending.

As mentioned above, current expenditures are disaggregated into spending for K-12 and higher education, but also into two additional categories: "other" and "not distributed." The latter two categories, as defined by UNESCO, include, respectively, spending on "special, adult, and other types of education which cannot be classified by level" and "administration for which there is no breakdown by level of education." The U.S. assigns no expenditures to these two categories while in other countries these two items account for up to 25 percent of all current expenditures. Ignoring these two categories would have seriously biased our results. To compare K-12 expenditures among countries, all education spending, including the sizable expenditures listed in the "other" and "not distributed" categories, must be assigned to either K-12 or higher education.

The exact distribution of these expenditures by level of education is not available. Therefore, we estimate their contribution to total K-12 spending by assuming that spending in these two categories is distributed between K-12 and higher education in the same proportion as is the rest of current spending. Adding these amounts to the preliminary K-12 total described above gives total K-12 spending.

1985 U.S. education expenditures are obtained from the *Digest of Education Statistics*. We want to estimate 1985 U.S. spending on K-12 by the same method that is used for the other countries, i.e., by assuming that the percentage of total capital spending which goes to K-12 is the same as the percentage of current spending for K-12. Therefore, we need to know the percentage of current spending for K-12, as well as total current and capital spending for all levels of education. The *Digest* supplies most of these data, except the distribution of private K-12 spending between current and capital expenses. So one additional assumption is necessary to calculate total U.S. K-12 spending. We assume that the ratio of current to capital K-12 spending is the same for private expenditures as for public. We can then determine total K-12 spending for the U.S.

More detailed data show that current and capital spending in the U.S. are not distributed between K-12 and higher education in the same proportions. K-12 usually accounts for a larger share of current spending than of capital spending. Put another way, capital spending is skewed toward higher education. In our treatment of capital expenditures, some fraction of capital spending for higher education is attributed to K-12. Our method tends to over-estimate K-12 spending, especially for the U.S. where expenditures on higher education are so large. This upward bias in our estimate of K-12 spending, particularly for the U.S., is a bias against our conclusion that the U.S. is a low spender on pre-primary, primary, and secondary education.

Japan presents other difficulties. As noted above, 20 percent of all education spending in Japan is private money. Therefore we need to include both public and private expenditures in our calculations of K-12 spending. Beginning in 1984, UNESCO lists both total (public plus private) education spending and public spending for Japan. Prior to 1984, only public expenditures are provided. In Table 9, 1980 combined public and private education expenditures are estimated by increasing the 1980 public spending figure by the percentage of 1985 private to public spending. This assumes that private expenditure as a percentage of total spending was equal in 1980 and 1985. Another piece of information is also lacking. To calculate public plus private K-12 spending in 1980, the distribution of private as well as public spending by level of education is needed. But this information is provided for public spending only. Since private expenditures are skewed toward higher education, we would be wrong to assume equivalent distributions between K-12 and higher education for both public and private expenditures. Therefore, we use the 1985 distribution figure for public plus private spending, applied to the 1980 combined expenditures, to estimate total 1980 K-12 spending in Japan.

Enrollments and Enrollment Adjusted Expenditures

UNESCO data on enrollments are used to make all the international comparisons. The enrollment figures include students in both private and public schools since the expenditures cover both private and public schools.

Because different countries have different proportions of school-age children in their populations, some adjustment must be made for differing enrollment rates among countries. For example, when expenditures are expressed as a percentage of national income, a country with 20 percent of its population enrolled in school would be expected to spend more on education than a country with an enrollment rate of only 15 percent. To permit meaningful comparisons, expenditures must be adjusted to a common enrollment rate, where the enrollment rate is calculated as the percentage of the population actually enrolled in school.

Any enrollment rate could have been chosen as the standard to which all countries' expenditures are adjusted. We chose the 1985 U.S. rate. To adjust other countries' expenditures to the U.S. enrollment rate, foreign expenditures as a percentage of GDP are multiplied by the ratio of the U.S. enrollment rate to the foreign enrollment rate. This raises (lowers) expenditures for countries with enrollment rates below (above) those of the U.S. The adjusted expenditure figure shows the level of spending which would occur if each country enrolled the same percentage of the population as did the U.S., while its rate of spending remained unchanged. This adjustment assumes constant returns to scale in education.

Non-U.S. Averages

A non-U.S. average is the weighted average of all countries' (except the U.S.) expenditures expressed as a percentage of GDP. The weights are the ratio of the number of each country's students over the total number of students in all (except the U.S.) countries.

APPENDIX B: EDUCATION SHARE OF NATIONAL SPENDING

To indicate the national effort expended on education by each country, the education spending data in Table 1 is expressed as a portion of total national *income*, i.e., Gross Domestic Product. Usually national spending equals national income. However, when a country has a trade deficit (or surplus), national income and national spending diverge by the amount of the deficit (or surplus). This has the effect of making the education effort appear relatively greater in a deficit nation and relatively smaller in a surplus country. In effect, using national income as the denominator does not take into account the fact that the total national spending in a trade deficit country has been swollen by borrowing from abroad. In a trade deficit country, national spending is greater than national income, and education expenditures are a smaller share of national spending than of national income. Thus, a more accurate picture might be obtained by comparing the fraction of each country's total national *spending* which is devoted to education.

Table B1 shows education expenditures as a percentage of national spending for the U.S., which has a large trade deficit, and the two major trade surplus countries -- West Germany and Japan. In 1985, U.S. spending on pre-primary, primary and secondary education was only 3.99 percent of total national spending, while Germany spent 4.81 percent and Japan 4.92 percent. In either case, whether education expenditures are calculated as a share of national income or national spending, the U.S. spends less than all but two of the 16 countries studied.

TABLE B1: TRADE ADJUSTED EDUCATION EXPENDITURES, 1985
(in millions)

	Germany (DM)	Japan (Y)	United States ($)
1. GDP	1,830,490	316,303,000	3,967,472
2. Trade Surplus	66,390	10,775,000	-118,652
3. Total Spending (1-2)	1,764,100	305,528,000	4,086,124
4. Adjusted K-12 Spending	84,806	15,022,619	162,960
-As Share of GDP	4.6%	4.8%	4.1%
-As Share of Total Spending	4.8%	4.9%	4.0%

Sources: National Center for Education Statistics, U.S. Department of Education; *Digest of Educational Statistics*, 1988.
UNESCO; *Statistical Yearbook*, 1988.
OECD, *National Accounts*, Vol. 1, 1989.

Endnotes

1. Speech at Education Summit, University of Virginia, September, 28, 1989. (White House transcript).

2. Press Briefing, Charlottesville, Virginia: September 27, 1989. (White House transcript).

3. Press Conference, May 3, 1989. (U.S. Department of Education transcript).

4. Speech at an American Council for Capital Formation conference, Washington, D.C., October 12, 1989. (ACCF transcript).

5. "Bargain Remedies for our Educators," *New York Times*, June 22, 1989.

6. NBC "Today Show," September 27, 1989.

7. Speech at an American Council for Capital Formation conference, Washington, D.C., October 12, 1989. (ACCF transcript).

8. Included in the study are Canada, Japan, Australia, and all of western Europe, except for the three least wealthy countries: Turkey, Greece and Portugal. Spain is omitted because the UNESCO data are insufficient, and Luxembourg because of its small size. Other analysts might prefer another grouping of countries. However, any selection of industrialized countries would show the U.S. to be a relatively low spender on education.

9. UNESCO. 1988. *Statistical Yearbook*. Paris: UNESCO. This is virtually the only source of data for making international comparisons of education spending. It was the data source for comparative studies of education spending done by the U.S. Department of Education and the Congressional Research Service. Some of the UNESCO data are reproduced in the annual *Statistical Abstract of the United States* by the U.S. Department of Commerce.

10. National Center for Education Statistics, U.S. Department of Education. 1988. *Digest of Education Statistics*. Washington, D.C.: Government Printing Office.

11. It might be argued that the U.S. "backloads" education system by putting more money into higher education. If so, comparing education spending at the K-12 level, as we do, biases any comparison against the U.S. system and the appropriate comparison is spending for all education levels (which shows the U.S. is a relatively high spender). This may or may not be so. However, if the U.S. system must be evaluated at the collegiate level then no cross-country comparisons of spending and student performance are

possible since student test scores are only available for fourteen year olds. As a result, there are no data to support the claim that we have high spending and low performance.

12. There are many factors which account for the lower expenditures of private schools. In 1985, 75 percent of private primary and secondary students were in grades K-8, and only 25 percent were in grades 9-12. Education in the lower grades is less expensive than education in higher grades. Many private schools offer fewer extracurricular activities and special classes than do public schools. Private schools also receive some public monies, although the U.S. Department of Education does not calculate the exact amounts. The sources of these funds include the Title I program for low income students, salaries for some special education teachers, sharing of textbooks and bus transportation, and others.

13. Purchasing power parity rates could be used for the conversions, but these also give misleading results. Expenditures must be related to some measure of national income.

14. This is not a second, independent confirmation of this ranking, but a different calculation using the same data as in Table 1.

15. The enrollment adjusted expenditure figures of Tables 7 and 10 differ from those in Tables 1 and 9. Since UNESCO does not provide any expenditure or enrollment information for years after 1986, all data, both expenditures and enrollments, in Tables 7 and 10 were obtained from the 1988 and 1989 (forthcoming) *Digest of Education Statistics*. The 1985 figure of 4.08 percent, calculated from the *Digest* data, is close to the value in Tables 1 and 9 of 4.1 percent. Differences stem from our use of a calculated capital expenditure figure which is greater than true spending, and from minor discrepancies between the U.S. and UNESCO data. The 1980 figure of 4.1 percent in Table 9 is 6 percent greater than the 3.88 percent shown in Tables 7 and 10. UNESCO lists 1980 K-12 expenditure as $116.0 billion which is very similar to the 1981 *Digest's* figure of $116.3 billion. However, the 1988 *Digest* gives a revised 1980 K-12 expenditure of $112.3 billion, and this is the value used in Tables 7 and 10. Also, UNESCO enrollment figures tend to be larger than those reported by the U.S. These two factors account for the difference between the 1980 numbers.

16. Hough, J.R. 1984. "France" in *Educational Policy, an International Survey*, J.R.Hough, ed., New York: St Martin's Press.

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UNITED STATES DEPARTMENT OF EDUCATION
PUBLIC AFFAIRS

SHORTCHANGING EDUCATION: A CASE STUDY IN FLAWED ECONOMICS

Technical Assessment

Overview

The Economic Policy Institute (EPI) study never does what it claims to do--measure comparative education spending levels between the United States and other industrialized nations. Such a comparison requires a measure of per pupil spending in each country's value in a common currency (e.g., U.S. dollars). Hence, the EPI study shifts the focus of the education debate away from the critical issue of how to reform the U.S. education system to that of matching spending with other nations.

1. The Economic Policy Institute's proposed measure, education's share of national income, is not an appropriate measure of the commitment of a nation for education.

The Economic Policy Institute (EPI) calculates a country's education spending as the ratio of that country's educational expenditures to its national income. In fact, this is not a measure of spending commitment at all. Its value depends not only on what a country is spending on education (i.e., the numerator of the ratio), but also on the size of its economy (i.e., the denominator of the ratio).

Although the EPI report uses its measure as interchangeable with spending levels, the two are not equivalent. The following examples illustrate the differences among measures. Applying the EPI statistic to the 50 U.S. States (1986), Minnesota's education expenditures absorbed 3.7 percent of its State's income and Mississippi's education expenditures absorbed 3.9 percent of its State's income. Yet no one would conclude that Mississippi, a relatively low-income State, devotes more resources to education than Minnesota, a relatively high-income State. Actual expenditures per pupil, an appropriate measure of educational spending, varied widely between the two States--$4,180 in Minnesota compared to $2,350 per pupil in Mississippi.

Food expenditure comparisons among nations further illustrate the wrong headedness of the EPI approach. Impoverished nations, such as Ethiopia and India, devote about half their national income to food, roughly five times the U.S. percentage. Yet, no one would conclude that these nations actually achieve higher real levels of food expenditures, nor that the U.S. should increase its food expenditures to reach the percentages spent in less well-off countries.

2. The Purchasing Power Parity (PPP) index is a superior method for equating education expenditure levels among countries. The PPP adjusted expenditures "can be applied to obtain 'real' quantity comparisons between countries at a certain time." (OECD) When used to equate per student expenditures across nations, the ranking of nations changes dramatically from the EPI analysis.

Within a country, resources for education are measured by its spending per pupil, with education spending expressed in terms of that country's own currency. For the U.S., this is expressed as the dollar value of its expenditures per pupil. International spending comparisons require equating currency values across countries. While market exchange rates would translate expenditures of foreign currencies into their U.S. dollar equivalents, the results would be questionable because of the substantial fluctuations in exchange rates.

While the exchange rate approach is flawed, the solution is not to throw out per pupil spending comparisons, but to apply a more accurate method for equating currencies. The Purchasing Power Parity (PPP) index is such a measure. The Organization for Economic Cooperation and Development (OECD), whose member countries are included in the EPI list of countries, commonly uses this index for generating comparative international expenditure statistics.

Construction of the PPP index is similar to that of the U.S. Consumer Price Index (CPI). Both are based on the comparative cost of a fixed market basket of goods. While the CPI measures comparative costs of purchasing a fixed market basket between two time periods, the PPP measures comparative costs of a common market basket between two countries. Thus, the PPP measures "the number of U.S. dollars needed in each country to buy the same representative basket of fixed goods and services costing $100 in the United States."

Table 1 displays the PPP values for OECD nations for three years--1985, 1987, and 1988. An increase in the index means that it costs more dollars to purchase the same goods. (Note the generally small changes in the magnitudes between 1985 and 1988 for most nations, in contrast to the sharp decline in the value of the dollar as shown by the market exchange rates.)

3. **The EPI paper classifies K through 12 as including pre-primary education.**

Appendix A of the EPI paper states that "In this paper, when the expression K-12 is used, 'K' represents all the pre-primary years." This definition of K through 12 is not only deceptive, but biases aggregate public expenditure figures against the U.S. Private spending by families with young children constitutes a much more significant share of total pre-primary education in the U.S. than in most other nations. Hence, total U.S. spending for pre-primary education is understated relative to those of other nations in which pre-primary education is publicly supported and included in their government's reported figures.

4. The inclusion of expenditures in the "other" and "not distributed" categories may bias results against the U.S. which does not report spending under these categories.

These categories are not well-defined by UNESCO, and moreover, there is no breakdown by education level. According to OECD, "other expenditures" are those which cannot be classified in categories such as instructional staff, administration, and materials. The "not distributed" category refers to government subsidies or transfers to public and private institutions which cannot be separated by purpose, mainly due to the administrative autonomy of the recipient institutions.

5. When pre-K through 12 spending is accurately compared to other nations, the U.S. ranks second only to Switzerland out of 22 OECD countries. If the uncertain "other" and "not

distributed" categories are included, the U.S. ranks fifth (Table 2). (Note: The EPI comparisons have been extended to include all 22 OECD countries for which the PPP is available.)

Table 2 uses the same UNESCO information on country expenditures and enrollments as did the EPI. It applies the PPP index to equate currencies across countries.

Two rankings are shown. U.S. per pupil spending ranks second out of 22 OECD countries, using only known expenditures. When the unknown spending categories are included, the U.S. ranks fifth out of 22.

6. Research has supported the position that the discussion on how to improve education must focus on how to improve the use of resources.

In a comprehensive review of 187 studies of the relationship between spending and achievement scores, Eric Hanushek of the University of Rochester found no significant correlation between the two.

Moreover, between school years 1980-1981 and 1988-1989, aggregate spending on elementary and secondary education, adjusted for inflation, rose from $157 to $199 billion (in

1988-89 dollars) for an increase of about 27 percent. Average salaries for public school teachers rose from $24,632 to $29,567 (in constant dollars) over the same period. Pupil-to-teacher ratios decreased from 18.9 to 17.6 percent.

However, over this same period, test scores have improved very little. Recent evidence from the National Assessment of Educational Progress (NAEP) shows that reading and writing scores have remained virtually unchanged.

TABLE 1

COMPARISON OF INTERNATIONAL CURRENCIES

	Comparative Price Levels			Purchasing Power Parities		
	1985	1987	1988	1985	1987	1988
Australia	86	94	111	1.24	1.35	1.42
Austria	80	133	133	16.6	16.8	16.4
Belgium	75	119	118	44.6	44.5	43.5
Canada	89	93	101	1.22	1.23	1.24
Denmark	82	149	154	9.8	10.2	10.3
Finland	96	141	153	5.97	6.21	6.39
France	81	124	124	7.27	7.43	7.41
Germany	84	137	138	2.48	2.47	2.42
Greece	56	74	77	77.3	100	110
Iceland	91	138	150	37.7	53.3	64.6
Ireland	76	110	111	0.723	0.74	0.731
Italy	68	108	111	1302	1406	1440
Japan	93	147	182	222	213	207
Luxembourg	73	110	110	43.1	41	40.3
Netherlands	77	119	119	2.55	2.4	2.36
New Zealand	67	89	114	1.35	1.67	1.75
Norway	100	128	132	8.83	8.64	8.6
Portugal	39	60	63	66.2	84.6	91.2
Spain	56	86	93	95.3	106	106
Sweden	95	137	146	8.15	8.69	8.93
Switzerland	98	163	166	2.42	2.43	2.42
Turkey	29	31	30	153	264	422
United Kingdom	73	95	107	0.588	0.583	0.601
United States	100	100	100	1	1	1

The comparative price levels show the number of U.S. dollars needed in each country to buy the same representative basket of final goods and services costing $100 in the United States. They are based on the purchasing power parity index for each country.

Purchasing power parities are indexes given in national currency units per U.S. dollar.

SOURCE: Organization for Economic Cooperation and Development (OECD)

TABLE 2

INTERNATIONAL COMPARISONS OF PER STUDENT EXPENDITURES (1)
(Pre–K through Secondary School)

	Year	Current Expenditures Per Student	Rank	Current Expenditures Per Student Including Unknown Other Expenditures	Rank
Switzerland	1985	$3,683	1	$3,874	1
United States	1985	$3,310	2	$3,310	5
Sweden	1985	$3,214	3	$3,819	2
Canada	1985	$3,192	4	$3,499	4
Denmark	1986	$3,089	5	$3,596	3
Norway	1985	$2,900	6	$3,277	6
Luxembourg	1983	$2,596	7	$2,970	7
Austria	1985	$2,497	8	$2,829	8
West Germany	1985	$2,253	9	$2,530	9
Belgium	1985	$2,234	10	$2,509	10
France	1984	$1,996	11	$2,329	11
Australia	1985	$1,995	12	$2,147	14
United Kingdom	1984	$1,897	13	$2,155	12
Netherlands	1984	$1,860	14	$2,152	13
Japan	1985	$1,805	15	$2,079	15
New Zealand	1985	$1,262	16	$1,324	17
Italy	1983	$1,249	17	$1,568	16
Ireland	1984	$1,108	18	$1,143	18
Portugal	1985	$911	19	$963	19
Spain	1979	$598	20	$623	20
Greece	1984	$514	21	$520	21
Turkey	1985	$241	22	$260	22

(1) Per student expenditures in foreign currencies are expressed in dollar values using the 1985 Purchasing Power Parities (PPP) Index supplied by the Organization for Economic Cooperation and Development (OECD).

Economic Policy Institute

1730 RHODE ISLAND AVENUE, NW • SUITE 812 • WASHINGTON, DC 20036 • 202/775-8810

MEASURING COMPARATIVE EDUCATION SPENDING: A RESPONSE TO THE DEPARTMENT OF EDUCATION

by M. Edith Rasell and Lawrence Mishel

INTRODUCTION

On January 17 the Economic Policy Institute released our study showing the U.S. spends less on pre-primary, primary and secondary education than all other industrialized countries except two. The study has been widely reported in the news media. Shortly after its release, the Department of Education issued a "Technical Assessment" of the report in which they challenged our methodology and conclusions. This paper gives our responses to each of the issues raised by the Department of Education. It is our conclusion, based on the evaluation outlined below, that the Department of Education's criticisms are without merit and do not affect our original finding: the U.S. spends less than most other industrialized countries on K-12 education. Following a brief overview, detailed discussion of each point begins on page 3.

I. The Department charges that our method, comparing expenditures expressed as a share of national income, is inappropriate.

> **Our Response**: Expenditures expressed as a share of national income provide the most accurate comparisons of education effort and resources provided to students. This is the most commonly used and widely accepted measure of expenditure comparison. It has been frequently cited by Administration officials in the past and, contrary to claims made by the Department of Education, it is the measure used by the Organisation for Economic Co-operation and Development (OECD), as seen in their recent comparative study on education.

II. The Department would use per pupil expenditures as the preferred measure of comparison.

Our Response: Per pupil expenditures provide valid comparisons only if used in conjunction with a measure of relative incomes or prices. The Department's Mississippi - Minnesota example, discussed below, illustrates how misleading per pupil expenditure figures are, and shows the validity of share-of-income comparisons.

III. The Department recommends using Purchasing Power Parity (PPP) exchange rates to translate foreign expenditure per pupil figures into dollars which can then be compared directly.

Our Response: PPPs show relative standards of living among countries, but cannot be used to compare the quantity or quality of goods and services which can be purchased with a given expenditure.

IV. The Department charges that including expenditures listed by UNESCO in the "other" and "not distributed" categories may bias results against the U.S.

Our Response: Omitting these two categories of education spending, as the Department of Education suggests, would lessen the accuracy of the study.

V. The Department charges that we understate U.S. spending on pre-primary education.

Our Response: The U.S. expenditure figure, obtained from the Department of Education, does not include all private spending on pre-primary education. However, in all the other countries except Japan, the expenditures do not include any private expenditures on either pre-primary, primary or secondary school. Since these expenditures are all relatively small, their inclusion or omission has only minor affects on countries' relative expenditure levels.

We discuss each of these topics in more detail below.

I. ARE COMPARISONS OF EDUCATION SPENDING AS A SHARE OF NATIONAL INCOME APPROPRIATE?

In making our comparisons of international spending, we use the most commonly accepted and widely used measure of spending comparisons: expenditures expressed as a percentage of national income (GDP or GNP). Administration officials use this measure of education spending (see "Shortchanging Education", page 2). Roger Porter, the White House Domestic Policy Advisor, remarked in December 1989, that, compared to other countries, U.S. spending for education is "more per capita, more per student, it is more as a share of our gross national product. We spend one-and-a-half percent of GNP more than the Japanese do on education."[1] The only education spending comparisons shown in the UNESCO Statistical Yearbook use this measure, and this comparison of education expenditures is the only one presented in the Statistical Abstract of the United States from the U.S. Census Bureau. In a recent Cato Institute report on comparative education spending, share of national income is the only measure of comparison used. World Bank comparisons of education spending are presented as shares of government budget along with the budget's share of national income. International comparisons of health care expenditures are routinely stated in terms of spending as a percentage of national income, and the CIA compares defense spending between countries by examining expenditures as a share of national income (copies of these reports are attached).

The Department of Education claims that the Organisation for Economic Cooperation and Development (OECD) "commonly uses a [purchasing power parity index] for generating comparative international expenditure statistics." We disagree. For example, the most recent OECD study of international education expenditures,[2] published in 1989, uses expenditures as a percent of national income and per student expenditures as a percent of per capita national income as the methods of comparison (see attached). These are the same two measures of comparative spending that we identify as appropriate. There is no mention of purchasing power parity (PPP) in the book nor any discussion of per pupil expenditures (see below for a further discussion of PPPs).

Expressing expenditures as a percentage of national income gives the most accurate international comparisons. And it is by this measure that we find in 1985, the last year for which data are available, the U.S. ranked fourteenth out of sixteen industrialized countries in spending on K-12, spending more than only two countries, and less than thirteen.

II. ARE EDUCATION EXPENDITURES PER PUPIL THE BEST MEASURE FOR COMPARING SPENDING AMONG COUNTRIES?

There are two problems with comparisons of education spending per pupil. First, a per pupil expenditure comparison is misleading when the units being compared (countries or states) have different wage and income levels and thus different costs for educational resources (e.g., teachers). Second, spending per pupil comparisons necessarily involve conversions of foreign currency to dollars, leaving the comparisons subject to misleading methodologies.

Consider first the issue of making comparisons independently of wages and costs. Just knowing per pupil expenditures for each country does not tell us how many education resources are actually being purchased. One country may spend more per student, but because costs (prices and wages) are higher, the expenditure may actually purchase less -- fewer teachers, fewer schools, fewer books, etc., than a smaller expenditure in a country which has lower costs and is able to purchase more for its money. It is not possible to compare education spending in any meaningful way without simultaneously examining relative costs. But costs generally reflect wages. Countries with higher wages usually have higher costs. Higher wages mean a higher standard of living and higher national income. Therefore we can meaningfully compare expenditures by examining them in relation to national income. This is the measure we (and many others) have chosen to use: expenditures as a share of national income. Examining expenditure figures in isolation from income levels or some measure of costs is misleading. The Department of Education's comparison of spending in Minnesota and Mississippi serves to prove our point.

The Department of Education's Mississippi - Minnesota Example

The Department of Education's January 16 response to

"Shortchanging Education" compares education spending in Minnesota and Mississippi. They describe 1986 spending in the two states using both of the measures we have been considering: per student expenditures ($4180 in Minnesota and $2350 in Mississippi) and expenditures as a percentage of state income (3.7 percent in Minnesota and 3.9 percent in Mississippi). These figures are shown in the table. The measure of spending being supported by the Department of Education, the first of these two, shows Minnesota to far outspend Mississippi, while the other measure (which we use) shows Mississippi to slightly outspend Minnesota. We will use this example to show that a share of income comparison of education spending provides the best insight into the level of educational resources being offered students.

EDUCATION EXPENDITURES IN MINNESOTA AND MISSISSIPPI, 1986.

		Minnesota	Mississippi	Minn/ Miss
	Current Expenditures as a Percent of State Income			
(1)	-as reported in Dept. of Ed. response to "Shortchanging Education"	3.7%	3.9%	
(2)	-actual correct expenditures	3.7%	3.5%	
(3)	-K-12 spending adjusted for Mississippi K-12 attendance	4.2%	3.5%	120%
(4)	Expenditures Per Student Attending School	$4180	$2350	178%
(5)	-corrected for relative teacher wages	$2884	$2350	123%

Sources: National Center for Education Statistics, U.S. Department of Education, Digest of Education Statistics; 1988 and 1989.

(a) Erroneous Data from the Department of Education

First, we must correct the Department of Education's data. In calculating per student expenditures, they use actual 1986 operating expenses. But in the percent-of-state-income calculation, they use estimated 1986 operating expenditures which overstate Mississippi's expenditures by 11.6 percent while the Minnesota estimate is quite close to the actual expenditure. Actual 1986 operating expenditures were 3.5 percent of Mississippi state income and 3.7 percent of Minnesota state income (see row 2 in the table), not 3.9 and 3.7, respectively, as reported by the Department of Education. Also, we must adjust expenditures for Mississippi's higher K-12 attendance, calculated as a percent of the total state population. K-12 attendance in Mississippi is 18.04 percent of the population, while in Minnesota is 16.00 percent. On this basis alone, we would expect Mississippi to spend a larger share of state income on K-12 education than Minnesota. Adjusting Minnesota expenditures to the Mississippi attendance level, as explained in "Shortchanging Education," shows Minnesota to spend 4.2 percent of state income to Mississippi's 3.5 percent, or put another way, Minnesota spends a 20 percent larger share of its income on education than Mississippi.

Per student expenditures are $4180 and $2350 for Minnesota and Mississippi, respectively, indicating that Minnesota spends 78 percent more per pupil than Mississippi. By either measure, Minnesota spends more on education than Mississippi. The important question is, does Minnesota provide 78 percent more educational resources to its students (as the per pupil comparison suggests) or 20 percent more educational resources (as the share of state income comparison suggests)?

(b) Taking Wage Levels into Account

We cannot answer this question until we know how costs and wages in Mississippi compare with those in Minnesota. In fact, costs are far lower in Mississippi reflecting lower incomes and wages. In 1986, the year we are examining, teachers' salaries in Mississippi were 69 percent of those in Minnesota. Construction costs, heating costs and wages are lower in Mississippi than in Minnesota. Using relative teachers' salaries as a indicator of relative costs in education, we estimate that in Minnesota every dollar spent buys only about two-thirds of what a dollar buys in Mississippi. $4180 spent in Minnesota is equivalent to spending $2884 ($4180 x .69) in Mississippi. Therefore, to compare the actual level of educational services provided in the two states, we must compare spending levels of $2884 (the Minnesota level adjusted for higher wages and costs) and $2350 (in Mississippi). By this comparison, Minnesota still spends 23 percent more per student than does Mississippi. But this is very similar to the relative spending levels shown by our percent-of-state-income comparison (Minnesota outspends Mississippi by 20 percent), and very different from the Department of Education preferred comparison found by comparing per student expenditures uncorrected for wages (Minnesota outspends Mississippi by 78 percent).

The Mississippi and Minnesota example shows that comparisons of per student expenditures are misleading if relative wage, cost or income levels are not factored into the calculation. If we do not know the actual wage and cost levels necessary to adjust expenditure figures, (which is frequently the case, particularly in cross-national studies), accurate comparisons can only be made by examining spending as a percent of state (or national) income.

III. ARE PURCHASING POWER PARITIES APPROPRIATE FOR CONVERTING FOREIGN CURRENCIES TO DOLLARS WHEN COMPARING DIFFERING LEVELS OF EDUCATION RESOURCES PROVIDED TO STUDENTS?

International comparisons based on per pupil expenditures necessarily run into another difficulty -- how to translate each country's spending into a common currency, traditionally the dollar. There are two means by which this conversion could be accomplished. One way is to use actual exchange rates. The Department of Education now agrees with us that this method frequently gives misleading information. The second method of conversion, currently being championed by the Department, uses purchasing power parities (PPPs). This process is equally flawed and should not be used.

As the name suggests, PPPs are hypothetical exchange rates which are constructed to show what the actual exchange rates would have to be in order for goods and services to cost the same in every country. These PPP rates were designed for comparing standards of living across countries--how many consumer goods and services people can afford to buy. PPP exchange rates do not provide a cross-national comparison of what can be purchased for a given expenditure. They cannot be used to compare educational effort nor compare resources provided to students. PPPs are completely inadequate for the task for which the Department of Education would use them -- to compare expenditures between countries.

An example will illustrate the differences between comparing teachers' living standards (using PPPs) and comparing expenditures for educational services (which cannot be done with PPPs.) In 1985, primary education teachers' salaries in major cities in the U.S. averaged $26,267. In Tokyo, primary school teachers received ¥3,437 thousand for a nine month school year.[3] One could hire a teacher in the U.S. for $26,267 or one could hire a similar teacher in Japan for ¥3,437 thousand. To hire equivalent numbers of primary school teachers, for each dollar spent in the U.S., 131 yen (¥3,437,000/ $26,267) must be spent in Japan. The "exchange rate" necessary to provide equivalent numbers of primary school teachers is 131 yen to the dollar. This is in sharp contrast to the 1985 PPP exchange rate of 222 yen per dollar necessary to equalize teachers' living standards in each country.

To enjoy equivalent standards of living, a Japanese citizen needs an income of ¥222 for every dollar of income received by a U.S. citizen. So a Japanese teacher receiving only ¥131 for every dollar earned in the U.S. will have a living standard below that of the U.S. teacher.[4] However, to hire a teacher in Japan, one need only pay at the ¥131 rate, not the ¥222 rate. PPP exchange rates tell us about relative living standards among countries, (determined by the productivity of workers, abundance of resources such as land and energy, efficiency of markets, etc.), but offer few insights into comparisons of resources provided to students. Remember, the Bush Administration has been linking education spending and student achievement, so the issue is the comparative provision of resources to students.

The Bush Administration's and Department of Education's claims that we spend lavishly on education can be supported only if first, we compare per pupil expenditures without reference to wages, costs or incomes; and secondly, use purchasing power parities to convert the expenditures to dollars. By any other measure the U.S. seriously under-funds education compared to other industrialized nations.

IV. SHOULD THE "OTHER" AND "NOT DISTRIBUTED" CATEGORIES BE INCLUDED IN THE ANALYSIS?

As explained in our report, UNESCO defines the "other" and "not distributed" categories to include operating expenses for "special, adult and other types of education which cannot be classified by level" and "administration for which there is no breakdown by level of education." This is money spent on education, but it is not specifically assigned to K-12 or to higher education. (These are not insignificant amounts of money. For some countries, up to 25 percent of all education spending falls in these two categories.) The U.S. spends money in these areas, but when reporting to UNESCO, assigns these expenditures either to K-12 or to higher education. Therefore, the U.S. lists no expenditures in these two areas. Omitting these foreign expenditures from our comparisons would have decreased the accuracy of our results. Therefore, as explained in Appendix A of our report, for each country we ascribe the expenditures in these two categories to K-12 and higher education in the same proportion as the rest of the country's operating expenses are distributed.

V. IS THE U.S. EXPENDITURE UNDERSTATED DUE TO UNDER-COUNTED PRIVATE SPENDING ON EARLY CHILDHOOD EDUCATION?

We agree with the Department of Education that our study underreports private spending for pre-primary education. This occurs because Department of Education data, which we use, under-reports private pre-primary spending. (U.S. private primary and secondary school spending is fully counted.) A more inclusive accounting of all private spending would raise U.S. expenditures, but only by a small amount. However, we also omit from our comparisons all private spending abroad for all levels of education for all countries except Japan. But as we note in "Shortchanging Education," these amounts are small compared to total education expenditures. Arguably, the omitted foreign private expenditures for K-12 are at least as great as the omitted U.S. private expenditures for early childhood education. We suspect that including all these additional expenditures would have little affect on countries' relative spending levels.

CONCLUSION

We agree with the Department of Education that the improved use of existing resources is an important component of any school improvement regime. However, some desirable education reforms may require spending more money. Implementation of beneficial changes should not be opposed based on the mistaken notion that the U.S. already spends more than most other industrialized countries on K-12 education. In fact, the U.S. spends less than all our major competitors.

ENDNOTES

1. Speech before the National Conference of State Legislators State-Federal Assembly, December 14, 1989, Washington D.C.

2. Organisation for Economic Co-operation and Development. 1989. Education in OECD Countries, 1986-87. Paris: OECD.

3. Barro, Steven M. and Larry Suter. 1988. International Comparisons of Teachers' Salaries. Washington, D.C.: National Center for Education Statistics, U.S. Department of Education. (To compare teachers' annual pay, we must first equalize the length of the work year. The school year is 243 days in Japan and 180 days in the U.S. If Japanese teachers worked 180 days each year instead of 243, they would receive only 180/243 or 74 percent of their usual pay of ¥4,644 thousand, or ¥3,437 thousand.)

4. This is not to imply that U.S. teachers are highly paid compared to their counterparts abroad. Teachers in the U.S. receive a smaller percentage of per capita national income than do teachers in other industrialized countries. The standard of living of U.S. teachers compared to the average U.S. resident, is lower than for teachers in most other industrialized countries (see Barro and Suter).

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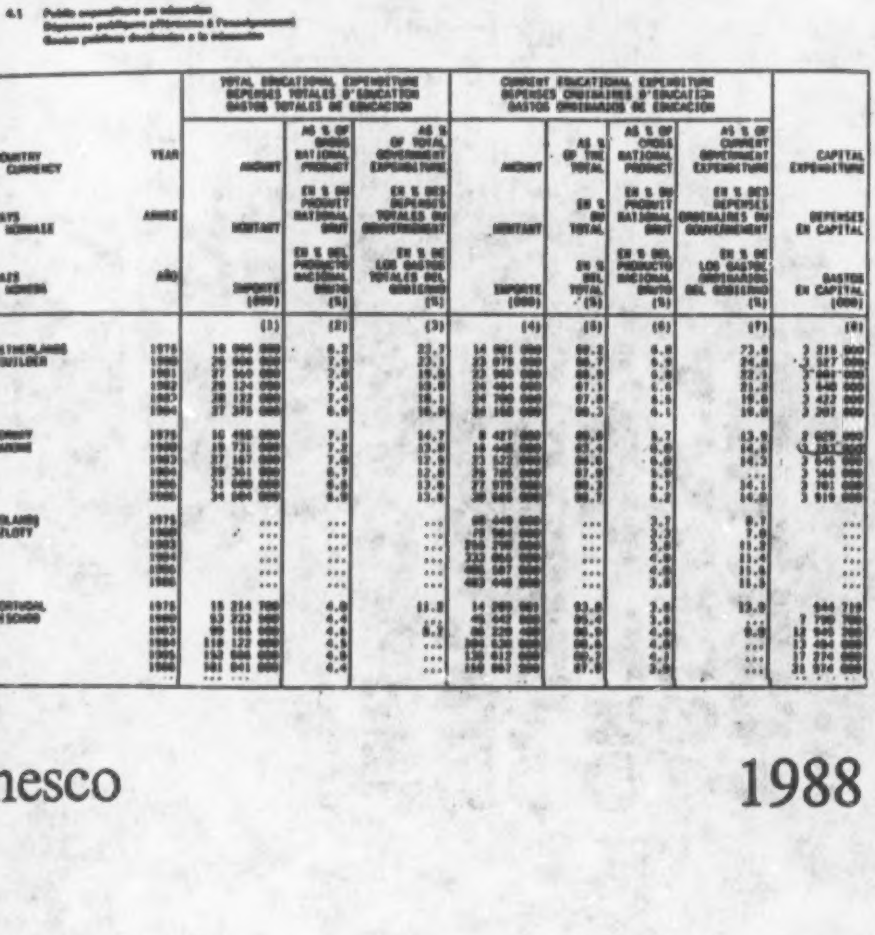

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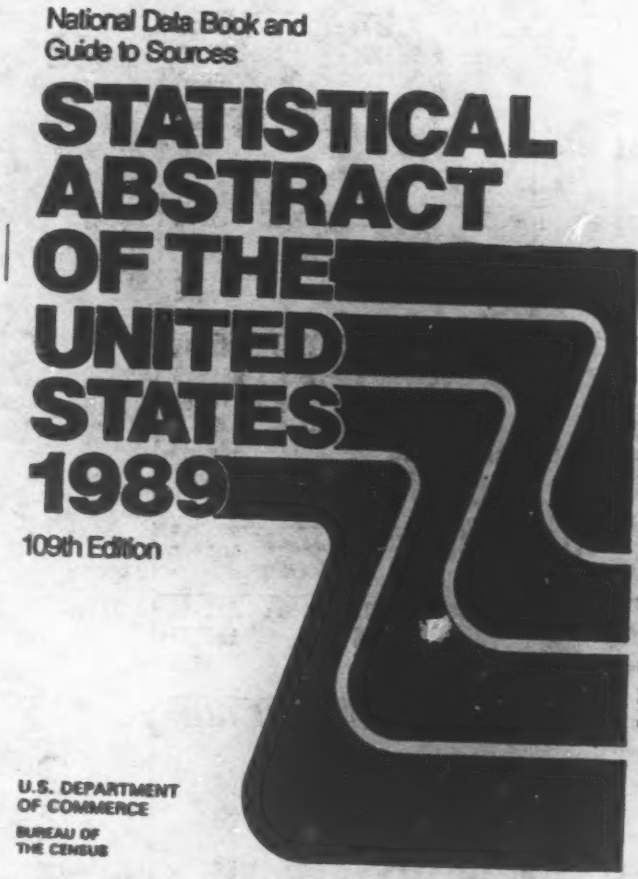
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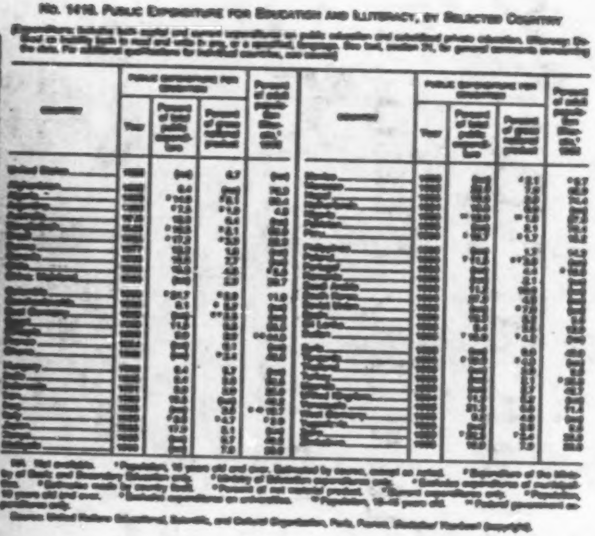

No. 1416. Public Expenditure for Education and Illiteracy, by Selected Country

Source: United Nations Educational, Scientific, and Cultural Organization, Paris, France, *Statistical Yearbook* (copyright).

Directorate of
Intelligence

Handbook of Economic Statistics, 1988

A Reference Aid

CPAS 88-10001
September 1988

Table 14
Defense Expenditures as a Share of Gross National Product

Percent

	1981	1982	1983	1984	1985
OECD [a]					
Australia	2.6	2.7	2.9	2.8	2.9
Austria	1.1	1.3	1.3	1.3	NA
Belgium	3.5	3.4	3.3	3.1	3.0
Canada	1.9	2.2	2.1	2.2	2.3
Denmark	2.6	2.6	2.5	2.4	2.3
Finland	1.5	1.6	1.7	1.5	NA
France	4.1	4.1	4.2	4.1	4.1
Greece	6.8	6.8	6.3	7.2	7.2
Ireland	1.6	1.9	1.9	1.8	1.9
Italy	2.5	2.6	2.7	2.7	2.7
Japan	.9	1.0	1.0	1.0	1.0
Luxembourg	1.0	.9	.9	.9	.8
Netherlands	3.2	3.2	3.2	3.2	3.1
New Zealand	2.2	2.3	2.1	2.0	2.0
Norway	3.0	3.1	3.2	2.9	3.2
Portugal	3.7	3.6	3.5	3.5	3.3
Spain	2.0	2.1	2.2	2.3	NA
Sweden	3.2	3.3	3.2	3.0	3.0
Switzerland	2.1	2.2	2.2	2.2	2.2
Turkey	5.0	5.3	5.0	4.5	4.6
United Kingdom	4.8	5.0	5.3	5.3	5.3
United States	5.6	6.2	6.4	6.3	6.6
West Germany	3.4	3.4	3.4	3.3	3.2
Less developed countries	6.1	6.5	6.5	6.2	6.0
OPEC	8.8	9.4	10.0	9.9	9.9
Iran	6.8	6.7	5.2	7.2	NA
Nigeria	2.8	2.2	2.1	1.6	1.4
Saudi Arabia	12.9	15.7	23.4	21.3	24.4

[a] Except for the United States, data are from the United States Arms Control and Disarmament Agency, *World Military Expenditures and Arms Transfers*, based on the ratio of military expenditures to GNP at current market prices. Military expenditures are for current and capital expenditures to meet the needs of the armed forces, including expenditures of national defense agencies for military programs; expenditures for the military components of such mixed activities as atomic energy, space, and research and development; military assistance to foreign countries; and expenditures on paramilitary forces where they contribute substantially to a country's military capabilities.

Education in OECD Countries 1986-87

A COMPENDIUM OF STATISTICAL INFORMATION

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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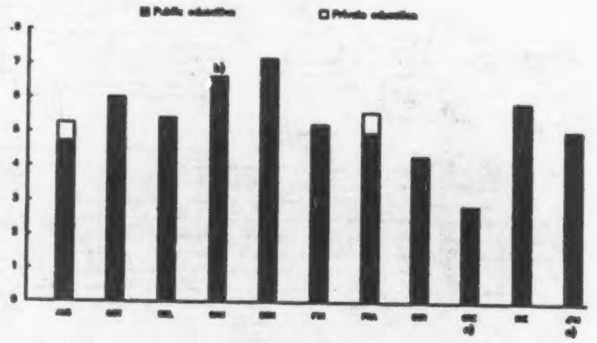
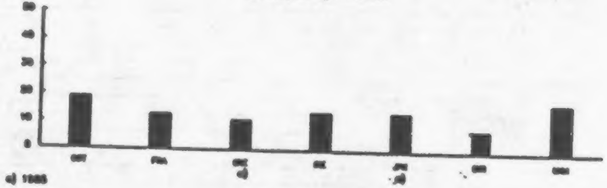
PARIS 1989

VII. PERCENTAGE OF GROSS DOMESTIC PRODUCT DEVOTED TO PUBLIC EXPENDITURE ON EDUCATION

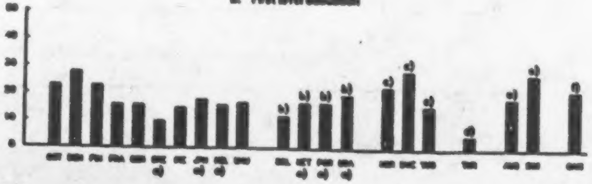


IX. PUBLIC EXPENDITURE ON PUBLIC EDUCATION PER PUPIL/STUDENT AS A PERCENTAGE OF PER CAPITA GROSS DOMESTIC PRODUCT

A. Pre-primary education



B. First level education



a) 1985
b) Including pre-primary
c) Including second level—first stage
d) Including pre-primary and second level—first stage
e) Including second level
f) Including pre-primary and second level

The CHAIRMAN. Thank you very much for a very provocative and I think a very useful assessment in terms of expenditures on education and a very timely report, particularly when we'll be considering the budget request of the administration.

How do you come back and respond—I think I know but I want to hear it from you—when they say, well, now, Doctor, we see in 1985 that the United States is spending $3,456, and outside of Sweden and Switzerland who are spending $4,200, there isn't a country in there that's spending as much as the U.S.? And that's all we've said. We've said we're spending more.

Now, you've got these other kinds of computations: percentage of GNP which includes inflators; rates of inflation; these other variables. And I've got the statistics right here. Why isn't this more accurate than your other kind of GNP which includes rates of inflation and a variety of other different factors? Just dollars and cents. I understand that. I can go down to the market, and I know what I can buy with that. You're talking about percent of GNP. What in the world does that mean?

Dr. MISHEL. Well, if it were someone from the administration offering that opinion, I would point to the fact that they had consistently used a variety of measures, including the ones that we use, measuring education expenditures as a share of GNP or a share of income. I would point to the fact that almost every other study we've seen——

The CHAIRMAN. Have they used those? Have they used those themselves?

Dr. MISHEL. Yes.

The CHAIRMAN. When was that, just roughly?

Dr. MISHEL. Well, we quoted from Mr. Roger Porter, who, for instance, has said that we spend more per capita, more per student, and it is more as a share of our gross national product. And, in fact, he went on to say that—compared our spending with Japanese spending, and the comparison he used is saying that we spend one-and-a-half percentage points more of our GNP than Japan. So he was using precisely that kind of measure when comparing it to Japan. It is somewhat after the fact that the administration contends that the only useful comparison is spending per pupil.

I would point to the fact that other studies consistently use education expenditures as a share of gross national product or gross domestic product, which is very close to it. I would point your attention to a very recent study by the OECD, the Organization for Economic Cooperation and Development, in basically the major industrialized countries called "Education in OECD Countries, 1986-87: A Compendium of Statistical Information."

In this study, there is no comparison anywhere, nor mention of a spending per pupil across countries. The only measures that they do use are spending as a share of national income, and another measure which we also employ, which is spending per pupil divided by per capita income.

The reason why we think that the spending-per-pupil measure is misleading is that it has two basic problems. One, which can quickly degenerate into some technical things which are very confusing, is that if you want to compare spending per pupil in France to that in the United States, you've got to somehow convert francs to U.S.

dollars. And there are a number of different ways to do it, and some are more problematic than others. But I think the major objection that we have to per-pupil spending comparisons is that they necessarily reflect differences in standards of living and wage levels across countries.

For instance, again coming back to France, the French gross national product per person is only two-thirds of ours. They have a lower standard of living, even a country as advanced as France. Now, education is very labor intensive. Their primary cost is for teachers and personnel. Necessarily, if you have higher wage rates, a higher standard of living, you will be spending more on your education. That does not necessarily reflect the fact that you are providing more to your students. In other words, just because teachers cost more here than in France, you have to spend more to put a teacher in front of a classroom.

I guess I'd also point to the fact that even if you want to make comparisons across States, a spending-per-pupil measure would be very misleading. Let me just offer two examples to demonstrate that.

One, take Alaska. Spending per pupil in Alaska is twice the national average. Does that mean that they are offering twice as many resources per pupil in Alaska as in the rest of the country? Well, in fact, wages for teachers—as well as for everybody else in Alaska—is far higher than the national average. Instructional staff earn 67 percent more in Alaska than they do in the rest of the country. So you wouldn't be surprised to find that they spend more per pupil.

If you look at education spending in Alaska as a share of their national income, you find that they're just about average. And if you were to adjust the spending per pupil for the fact that they have higher teacher costs, you would find that they were just about 20 percent above average. So on that case, we find that spending per pupil vast exaggerates the spending per pupil of a high wage State.

Let's take a low wage State, going down the alphabetical list, Arkansas. Arkansas' spending per pupil is around 24 percent below the average. However, teacher wages are about 26 percent below the average. If you compare spending as a share of the State income, they are an average State in terms of their educational effort.

I think it would be wrong to say that Arkansas spends very little effort on education because they have low spending per pupil. That reflects the lower wage levels in Arkansas.

We could go on with very many other examples, but certainly I think——

The CHAIRMAN. Well, the one you mention in your report is the comparison with Minnesota or Mississippi.

Dr. MISHEL. That was fun, yes.

The CHAIRMAN. The administration says we spend less in Mississippi on education, and you point this out, than Minnesota. But you say Mississippi spends a greater share of their wealth. Isn't that kind of natural? At least, Minnesota is still spending a good deal more in terms of absolute dollars, and when you look at what the outcomes are in those two States, why doesn't that reinforce the position of the administration, if you measure outcomes rather than inputs? And why isn't that, therefore, more supportive of their position?

Dr. MISHEL. Well, we had a lot of problems with their example of Minnesota and Mississippi, the first one being that they got their math wrong and were comparing some apples and oranges figures. But when, in fact, you do compare Mississippi and Minnesota, the first thing you need to do is to adjust for the fact that Mississippi has a much larger school population in terms of enrollment rates, which the administration ignored.

When you do just take into account that there are different school enrollment rates, you find that Minnesota spends more than Mississippi when you look at it as a share of income, as well as when you look at Minnesota spending as spending per pupil.

In fact, we also discovered that if you just take into account the differences in wages between Minnesota and Mississippi, you find that spending per pupil in Minnesota is 20 percent greater whether you look at it as a share of income or some measure of spending per pupil, adjusted for teacher wages.

The CHAIRMAN. Even though the amounts that would be expended would be almost twice as much.

Dr. MISHEL. Right. And it reflects the fact that there's a higher wage level in Minnesota. They obviously also have heating costs and other costs that aren't true in Mississippi.

The CHAIRMAN. How would you give the best arguments to the administration's criticism of your report? What do you think of the arguments that they make about your report? They've given an analysis of your report. You have rebutted it.

Dr. MISHEL. Yes.

The CHAIRMAN. What are the arguments that they make about it that they think are the most important, and what are your responses to them?

Dr. MISHEL. Well, I think the greatest thing at issue was whether you can use these per-pupil spending comparisons or you should make spending comparisons in terms of national income. The administration has come up with some results that show the U.S. being a high spender. One can only believe those results if you first believe that you should make spending-per-pupil comparisons; and, second, only if you believe that you can translate foreign currencies to U.S. dollars using something called purchasing power parities rather than market-determined exchange rates. So they have sort of two roads they have to go down in order to get the result that the U.S. spends more than everybody else.

I don't think most of the people in the economics profession would support their calculations. Their calculations have never been issued by anyone other than the administration, and only recently, not the comparisons that they were using 3 weeks ago.

I think that they do point out that we could probably use better data for across-country comparisons, and we would support the efforts to do that.

The CHAIRMAN. Is the per-pupil spending or share of GNP the best way to show the priority the Nation attaches to education?

Dr. MISHEL. Well, we suggest that it is spending as a share of your national income—or actually education spending is a share of your total spending that we think is the most appropriate measure of effort. It is the only one which, in fact, takes into account the different wage levels and differences in standard of living across the country, or States, for that matter.

The CHAIRMAN. Now, as I understand your report, you say that we have to spend $20 billion—I suppose that's Federal, State, or local—to reach what would be the average of the industrial nations of the world. What would you have to expend to be where Japan is, or what would you have to expend to be No. 1? Usually we like to be No. 1.

Dr. MISHEL. Right.

The CHAIRMAN. I hope that isn't still a dream that's lost, particularly in the areas of education where we have been.

Dr. MISHEL. Well, to be No. 1, we'd have to spend more than $100 billion, maybe $125 billion, to be equal to the Swedish level of spending. But just to come up to average, in 1989 dollars it would be around $27 billion. To come up to Japan, we would need to spend between 37 and 40 billion dollars.

The CHAIRMAN. I think we can start with the premise that just spending is not the answer, only just throwing money at things. We've learned that over the period of time. But it is a fairly good indication, I think, of where the Nation places its priorities. We've got scarce resources. We're making judgments to establish priorities, and that's really what this whole kind of process is about.

Finally, I think your study appropriately points out, when you add in what is spent in higher education, you basically mask what is actually being spent in the K through 12. And I think all of us are extremely proud of what's been done in higher education. We're facing a number of crises in higher education, but, nonetheless, we're still No. 1. Certainly we're spending more than other countries are spending on that. Maybe that's coincidental, but maybe it's not.

Nonetheless, if we look at both the student achievement and the comparison of countries in education expenditures, we can see that there's some difference between the countries that are spending more, even using your test, and where they end up in evaluation. There's not a lot of swings. Most of the ones that are spending more are still pretty much higher than us on the evaluations. There are some exceptions, but by and large the ones that are spending more are in the uppermost part of the industrial countries. But it seems that we could look at the United States, where we're not spending more in terms of the share of GNP, and we're also not scoring.

Do you think that's completely coincidental?

Dr. MISHEL. Well, we suggest that you may get what you pay for.

The CHAIRMAN. Senator Cochran.

Senator COCHRAN. Mr. Chairman, thank you very much.

I'm glad to have a chance to be here to hear some of the discussion about your study. I recall reading a news account of it when it was first released and though it was very interesting as an analysis of our spending as compared with our countries. But when I was reading the report, I couldn't help but think about reports that I had seen all in my life growing up in the State of Mississippi that we were always at the top of the list in spending as related to the total available to be spent by our State government on education. Year in and year out, the State of Mississippi was No. 1.

That was an interesting thing to know. But then when you looked around and saw the teacher salaries that were being paid in our State, the facilities that were available for students, many other things that, you know, were obvious and were facts that were relevant to whether or not we were making a good enough effort to create educational opportunities for the children of our State, it became obvious that we weren't doing as well as we should be. And we by comparison weren't doing nearly as well as many other States, particularly those from the more wealthy areas where you had a larger tax base.

What we found out about those studies and those comparisons was simply that Mississippi had very few dollars to spend on anything. And we were under severe pressures because we had an inadequate tax base to support a lot of the things that needed to be done in education. So while we found out we were doing a good job as far as allocation of the available resources for education was concerned, we weren't doing nearly enough.

Anyway, I was reminded when I was reading your analysis and your comparisons about the past and the fact that that's not always a good indication of whether you're doing enough. What are you comparing our system to?

I'm not criticizing your report. I'm just suggesting that it tells us something, but we shouldn't make the mistake of assuming that it tells us everything that we need to know about the quality of our education system or whether or not we are doing a good job or an inferior job in comparison with our friends around the world.

I think first of all about Great Britain, and they are a good country, I think, to look at very carefully. Because we'd just make an assumption—I don't know. Growing up, we assumed the British are quite right and do a good job at a lot of things. At least, they convey the impression that they're smarter than we are. I don't know whether they really are or not. [Laughter.]

Dr. Mishel. A very nice accent.

Senator Cochran. Something about it is impressive.

But I recall spending a year in the university system in Great Britain, or at least an island of Great Britain in the Republic of Ireland at Trinity College at the University of Dublin. And my observations were that the students who were there at the university had really done so much more in preparation for attending the university than we were required to do here in the United States. A tremendous amount of resources go into the primary public school system in Great Britain. Much more intensive studying goes on at that level than in our system here in the United States.

But then very few ever have an opportunity to go to college in Great Britain, and here almost everybody can go to college, through financial assistance programs and the easy access in terms of admission requirements in colleges and universities, private and public all over the United States. And the numbers, I would suggest, are just tremendous in terms of those students who have access to more education for a longer period of time as compared with Great Britain.

So comparing, for example, the amount of money spent in the United States on our elementary and secondary education program with that of Great Britain is not going to tell you a lot about the access to other educational opportunities that are available here in the United States for students that are not available for students in Great Britain.

That just comes to mind as one example of what a review like yours doesn't tell us. And so I guess what my suggestion is is that you have done a very helpful thing, I think, to give us the benefit of this information. But what we shouldn't do as a committee or as policymakers, or whatever we are, is overreact to it or jump to the wrong conclusions.

I don't know what conclusions we ought to jump to. I hope we can make more of our resources available to education this year than the President recommends. I think he has recommended that we do a better job in a lot of technical areas in how we approach the education challenge. And that's important to consider. And if we just say out of hand since something doesn't cost money it shouldn't be undertaken or it's not worthwhile, that's a mistake, too. So measuring things in dollars and cents can get us off on the wrong track there as well, if we reject suggestions simply because they don't require the expenditure of large sums of money.

Mr. Chairman, I'm sorry I've taken up so much time, but it just seems to me that there are some things that we ought to be talking about and thinking about, acknowledging as facts and real factors as we go about trying to develop and implement a workable and an improved education policy for the United States.

Dr. MISHEL. I think those are very useful remarks, Senator. We agree that one has to take into account the differences between educational systems, that we send more people to college than other countries. In fact, our figures show that we enroll at twice the rate in colleges as other countries, including Great Britain.

It's for that reason that we think that one shouldn't compare total education spending on K-12 and higher education with the test scores of 14-year-olds, which is essentially the argument that tends to be used, which is we spend a lot on education, including sending all these kids to college, but our 14-year-olds do poorly on math tests. We think that's very slipshod in terms of analysis of the relationship between spending and performance.

Moreover, we agree that we should have a debate that considers items on a school agenda not based on whether they cost money or don't cost money but based on their merits. I think that's very useful.

Getting to Mississippi, I think that you're right to point out that if you spend a larger share of a smaller State budget on education that that doesn't mean that you're doing very much for your students. And I think that dealing with the income differences across States is very important. That's why, for instance, in the Minnesota/Mississippi case that was raised by the Department of Education it's failed to point out that Mississippi gets ten percent of its budget from the Federal Government, but Minnesota gets about four percent—which I think is probably entirely appropriate. I guess as long as there are no Minnesota Senators here.

The CHAIRMAN. We've got one. He'll hear about it. We won't tell him.

Senator COCHRAN. Don't tell him. [Laughter.]

Dr. MISHEL. OK. I won't tell anybody.

I guess the other thing I would point out to you is that in terms of a spending-per-pupil comparison, Mississippi appears to spend some 32 percent below average. And I think that would be a gross mischaracterization of the effort of Mississippi in terms of education spending, because as you do suggest, there's a lower tax base, there's lower wages. And if you were to look at Mississippi spending the way that we do, as a share of its income, then you would find that Mississippi has about the average effort.

Now, that only tells us what kind of effort is being made, and that doesn't say what kind of effort should be made, either across States or across countries. Perhaps a State like Mississippi in its stage of economic development needs to, in fact, make greater efforts than other States. And that would be appropriate. But we can only measure what effort is being made, and then we should have a discussion about what kind of efforts should be made and in what ways you should spend money that pay off. Thank you.

The CHAIRMAN. Let me just conclude. Is that why you think, if we're looking at these figures, that we ought to look at the total country—because you're going to have disparities, within various nations. Do you think that that's something that we ought to take into consideration, too?

Dr. MISHEL. Sure. I think one has to consider that. I think there's even greater disparities at funding levels among U.S. local jurisdictions than there are in other countries which are more federalized and of more even distribution of school financing.

The CHAIRMAN. And was part of your point to try and deal with just the industrialized nations, to take at least the countries with roughly comparable kinds of standards of living? There are obviously important differences even in the 16 or so that you raise. But, nonetheless, what you're basically talking about, as I understood you to say, is what is considered to be the industrialized world. Using those top industrialized nations of the world that have at least some comparison in terms of standard of living—to try and look at the kind of priority that they are placing on education in designating a certain percent of their GNP for education.

Dr. MISHEL. That's exactly right. We didn't think it would be very useful to compare the U.S. to Mexico and Chile and other countries that have a far lower standard of living. We think that calls for a different type of analysis.

The CHAIRMAN. Thank you very much.

Dr. MISHEL. Thank you, Senator.

The CHAIRMAN. We appreciate it. Our second panel is Blanche Brownley, a mathematics teacher here in Washington. Ms. Brownley has won numerous awards and recognition as a teacher, including the President's Award for Excellence in Mathematics Teaching. She got her start in the original Teacher Corps Program. I believe she'll share that experience with us.

Also, Mr. David Rockefeller, Jr., Chairman of the Board of Recruiting New Teachers, a very creative media campaign which does just that.

And Barbara Hatton, who is the Deputy Director of the Education and Culture Program at the Ford Foundation, and who has done extensive work in minority teacher recruitment.

Mr. Rockefeller, it usually goes to the Senator from whose State you are to have the courtesy of introducing you to the committee, but I'm going to yield that distinction to a higher ranker on this—and that's a relative in my family, as I'm sure in yours, you understand that particular relationship.

I recognize Senator Rockefeller, who has been tireless in terms of his own commitment in education and also in strengthening the quality of our teachers, for whatever comments he would make.

Senator **Rockefeller**. Thank you, Mr. Chairman.

I just wanted on a very personal basis to welcome my first cousin, David Rockefeller, Jr., to this. I don't sit on this committee, and I have no business here except that I care enormously what happens here, not only through the math and science bill which I'm hoping is going to be included in one of Senator Kennedy's bills; but also to welcome you, David, as somebody I think that has made an incredible contribution already in terms of promoting the need for teachers in our society. And I think it's wonderful that you're testifying, that you bring forth a message of hope that teachers are responding.

Since you started in 1988 with your program, there's been over a quarter of a million people that have called your toll-free line at work. There is still a vision of teaching that teaching can make an enormous difference in this country, and that you really for a long time have tapped into that sense. It's been part of your own life, and you've done it with the Rockefeller Brothers Fund, which is a major foundation which you chair. You've put an educational component into that which was not there before, and you put an emphasis on teaching in that component, too. So I think not only through philanthropy, through business, through your own personal interests, you have made a major difference. And you're only beginning.

I'm very proud as your cousin and as the Senator from West Virginia to welcome you here.

Thank you, Mr. Chairman.

The **Chairman**. We're going to start with Ms. Brownley, if you would, please. We'll begin the testimony with her.

STATEMENTS OF BLANCHE SMITH BROWNLEY, MATHEMATICS TEACHER, FRIENDSHIP EDUCATIONAL CENTER, WASHINGTON, DC; DAVID ROCKEFELLER, JR., CHAIRMAN OF THE BOARD, RECRUITING NEW TEACHERS, INC., CAMBRIDGE, MA; AND BARBARA R. HATTON, DEPUTY DIRECTOR, EDUCATION AND CULTURE PROGRAM, THE FORD FOUNDATION, NEW YORK, NY

Ms. **Brownley**. Good morning, Mr. Chairman and members of the committee.

It is a great honor for me to be here today. I am a mathematics teacher at the Friendship Educational Center, a DC. public school in far Southeast Washington. From June 1971 to August 1972, I was a participant in the Urban Teacher Corps at Howard University. While in the Teacher Corps, I received high quality teacher training in an inner city school that included an internship working side by side with experienced master teachers, involvement in community services, and the completion of a university program to earn a Masters of Arts in Teaching degree. The Teacher Corps provided me with the foundation to succeed in the inner city schools, teaching the students that I wanted to reach. I have been teaching in the DC. public schools for the past 18 years, and my report that I submitted for the Congressional Record shows some of my achievements for the past 18 years.

I am here today to express my support for Senate bills 1675, 1676, and 498. The 1980's has been a period for identifying the problems in the Nation's educational system. Research has indicated that today's schools are not meeting the needs of many students. Many teachers see the real problem as the de-professionalization of teachers. How can teachers be expected to motivate and build self-esteem of students when society has demeaned the profession for years by rewarding teachers with low salaries, structuring the school day so there is little time for instruction, lowering teacher certification standards so that bodies and not minds are working with students, and cutting budgets so that teachers must work with a minimum of resources. What other profession has no room for its employees to grow unless they leave the profession?

Fortunately, the bills are looking at these aspects and proposing legislation to make the 1990's a period for improving the educational system. Important components of the bills will reinstate the Teacher Corps Program and mentor program for first-year teachers. These programs can be parallel to the intern mentor program that I worked with for 2 years. As a mentor, I experienced first-hand the problems of teacher recruitment, training, and retainment. Of the 24 new mathematics teachers with whom I worked, only six had teaching experience or education courses before accepting the position. At least 20 needed additional mathematics course before becoming certified. Teachers were hired who were not interested or qualified to teach mathematics.

The program attempted to assist the first-year teachers by giving them the opportunity to participate in university classes and by assigning a mentor or experienced teacher to coach, train, and evaluate them. With such support, not only was the retention and the professional development of new teachers enhanced, but there was also a screening out process for those who showed little aptitude for the classroom.

These components will also help benefit the experienced teacher. While in the program, I was given the opportunity to interact with the local universities, to share my experiences and expertise, and to develop myself professionally. The centers for experienced teachers will push for the development of a career ladder so that we can keep the best in the teaching profession.

Mr. Chairman and members of the committee, I strongly endorse the efforts and can assure you that when the bills are passed in their entirety, the Nation will begin to see a professional environment for teaching emerging in its schools.

Thank you for giving me this opportunity to address the committee today.

[The prepared statement of Ms. Brownley follows:]

Prepared Statement of Blanche Smith Brownley

Mr. Chairman and members of the Committee, it is a great honor for me to be here today. The topics discussed are very important to America which make them important to everyone in the room.

I am Blanche Smith Brownley, Mathematics Teacher at the Friendship Education Center, a DC Public School in far Southeast Washington. From June 1971 to August 1972, I was a participant in the Urban Teacher Corps at Howard University. During this period, I received high quality teacher training in an inner city school that included an internship working side by side with experienced master teachers, involvement in community services and the completion of a university program to earn a Masters of Arts in Teaching Degree. The Teacher Corps program provided me with the foundation to succeed in the inner city schools, teaching the minority students that I wanted to reach. During the last eighteen years, I have served as department chairperson, held offices in the local professional organization for mathematics teachers, participated and attended workshops nationally and internationally, presented workshops and taught methods classes locally, written proposals and received grants totaling at least $18,000 to implement school and self improvement programs, served as Mathematics Mentor Teacher for the DC School System and received the Presidential Award for Excellence in Mathematics Teaching (see Resume Appendix A).

In 1983, A Nation at Risk alerted the nation to the problem in our educational system. Several reports have analysed almost every aspect of the problem. A Nation Prepared: Education and the Economy calls for sweeping changes in educational policy to:

- Create a National Board for Professional Teaching Standards, organised with a regional and state membership structure, to establish high standards for what teachers need to know and be able to do, and to certify teachers who meet the standard.

- Restructure schools to provide a professional environment for teachers, freeing them to decide how best to meet state and local goals for children while holding them accountable for student progress.

- Restructure the teaching force, and introduce a new category of Lead Teachers with the proven ability to provide active leadership in redesigning the schools and in helping their colleagues to uphold high standards of learning and teaching.

- Require a bachelors degree in the arts and sciences as a prerequisite for the professional study of teaching.

- Develop a new professional curriculum in graduate schools of education leading to a Master in Teaching degree, based on systematic knowledge of teaching and including internships and residencies in the schools.

- Mobilize the nation's resources to prepare minority youngsters for teaching careers.

- Relate incentives for teachers to schoolwide student performance, and provide schools with the technology, services and staff essential to teacher productivity.

- Make teachers' salaries and career opportunities competitive with those in other professions 1/.

Senate Bills 1675 and 1675 are what is needed to redefine the essential standards of excellence for our educational system. An important component of the bills will introduce the idea of a pre-teaching experience for secondary school students. A program of this type has been piloted in Bronx, NY. It starts with ninth graders who are encouraged to take a rigorous academic program, tutor peers, and to assist in the office. By the junior or senior year, they are paired with a cooperating teacher with whom they work, not as a student of the class, but as a student of the teaching process. This program has helped students to voice more positive feelings toward school, teachers, and the teaching profession 2/. What better way to prepare students, especially minorities, for teaching careers.

Another component will be to provide college scholarships for those interested in teaching in inner city schools. There are many young Americans, especially minorities, who cannot afford the rising cost for college. The bill will provide an excellent tool to boost the educational pipeline (see Appendix B) and to place more minorities as positive role models in the nation's inner schools. This part of the legislation will indirectly affect the establishment of Professional Teaching Standards and encourage the nation's colleges and universities to develop teacher education programs that turn out teachers who are ready to accept the real challenges of the classroom with a dedication that will never falter.

The last component that I will address is the bills ability to place more focus on Teaching as a Profession. Research has indicated that today's schools are not meeting the needs of many students. There are many factors that contribute to the lower performance levels of our students. Some say that the problems are the curriculum, the structure of the schools, deficiencies in the ways that teachers are educated, and the decay in the social and economic structures of society. Many teachers see the real problem as the deprofessionalization of teachers. How can teachers be expected to motivate and build self esteem of students when society has demeaned the profession for years by rewarding teachers with low salaries (see Appendix C), by structuring schools so that there is little time for instruction, by lowering teaching standards so that bodies and not minds are working with students, and by cutting budgets so that teachers must work with a minimum of resources. What other profession has no room for its employees to grow unless you leave the profession. Fortunately, the bills are looking at these aspects and proposing legislation to make corrections.

Having worked two years as the Mathematics Mentor Teacher for the DC School System, I have experienced first hand the problems of teacher recruitment, training and retaining. Of the twenty-four new mathematics teachers with whom I have worked, only six had teaching experience or education courses before accepting the position. At least twenty needed additional mathematics courses before becoming certified. As you can see, my work was cut out for me. As the mentor, I worked closely with the new teachers devoting substantial time to each intern, usually observing him or her at least once every two weeks and consulting more frequently on matters of planning, teaching techniques, identifying teaching materials, assessment of students, and managing the classroom. I also had the responsibility of coaching, training and finally participating in the evaluation of the classroom performance of the new teacher. Another part of the program was for the first year teacher to participate in university classes to take some of the basic education courses. With such support not only was the retention and the professional development of new teachers enhanced but there was a screening out process for those who showed little aptitude for the classroom.

As the mentor, I served as an adjunct professor at the university to assist with planning and teaching classes to make sure that the new teachers' needs were being met. The program was not only a great help for new teachers but a great boost for me. I was given the opportunity to share experiences and expertise with new teachers while still being able to interact with students. My professional development was also greatly enhanced with courses on the importance of the mentor's role in instructional supervision, support,and evaluation of the new teacher. Formal and informal workshops and seminars were held to provide mentor teachers with skills and competencies in classroom management, discipline, instructional support, curriculum planning, and improvement of student performance. This same concept is one of the components of the proposed bills, that new teachers work with a mentor during their first year of teaching to increase the retention rate of new teachers and to provide incentives and professional development opportunities for experience teachers so that they can climb a career ladder to assume the role of a Lead Teacher.

Mr. Chairman and members of the Committee, the components of your bills are not independent of each other. They constitute a whole. None will succeed unless all are implemented. I strongly endorse the efforts of the Committee and can assure you that when the bills are passed in their entirety, the nation will begin to see a professional environment for teaching emerging in the nation's schools.

Thank you for giving me this opportunity to speak.

REFERENCES

1/ Carnegie Forum on Education and the Economy, A Nation Prepared: Teachers for the 21st Century. May, 1986.

2/ Nicholas J. Colleto, "Learning to Teach and to Respect Teaching", Education Leadership, November, 1988.

Appendix A

RESUME

Blanche S. Brownley
6600 Tall Oak Drive
Camp Springs, Md. 20748
(301) 449-6143

MAJOR ACCOMPLISHMENTS:

- President-Elect of the D. C. Council of Teachers of Mathematics. Served as chairman of the Publicity Committee and editor of the council'snewsletter. Wrote and edited articles, laidout and distributed the newsletter to 260 members.

- 1988 Cafritz Fellow. Granted $4,000 for professional growth. Used the grant money to attend the Space Academy for Teachers and to study in England.

- Elected to Who's Who in American Education in 1987-1988.

- G. T. E. Gift Fellow for 1986-1987. Granted $5,000 to carry out a program to enrich mathematics instruction at the school and $2,500 for personal development.

- Recipient of the Presidential Award for Excellence in Mathematics Teaching for 1986.

- "American Association for the Advancement of Science" 1986-1987 Mathematics Teacher Fellow. This involved developing approaches to teaching mathematical problem solving through the use of the Challenge of the Unknown materials.

- One of twenty-five middle grades mathematics teachers from across the nation selected to participate in a four week "Honors Teachers Workshop" at Michigan State University during the summer of '87.

- Coached the school's MATHCOUNTS team from 1984-1986, working with students after school to prepare them for the competition. The team placed second in 1984 and third in 1986 in the regional competitions.

- One of twenty-five participants in the NASA Educational Workshops for Mathematics and Science Teachers at the Goddard Space Flight Center during the summer of 1985. Participants were selected from all over the northeastern United States. Participated in workshops, meetings, field trips and experiments with many of NASA's top scientist and engineers. Received an Honors Teacher Award for my participation.

- Mathematics department chairperson at Friendship from 1976-1985.

- Member of the task force that wrote Shop and Go, a manual for D. C. Public School teachers outlining resources in the D. C. area.

- Wrote mathematic curriculum for the D. C. Public Schools during the summers of 1985, '86 and '87.

- Assistant instructor of the course Teaching Essential Mathematics during the 1986-87 school year. Worked on the team to design this new course for the D. C. Public Schools.

- Certified trainer for John Hopkins University's Student Team Learning program. The program encourages students to work in teams to insure mastery of objectives by all team members. Workshop leader for the D. C. Public Schools and workshop presenter at the third annual D. C. Teachers Convention.

- Team teacher of the workshop entitled "Effective Teaching of Junior High School Mathematics" during the summer of 1982. Also, served as demonstration teacher for Algebra I for the region during the '81-'82 school year.

- Completed 60+ graduate credits above my masters since 1972, and received a second master's degree from the University of the District of Columbia on May 10, 1986.

WORK HISTORY

Sept. '89 - Present	Mathematics Teacher Friendship Educational Center Washington, D. C.
Sept. '87 - June '89	Mathematics Mentor Teacher Incentive Programs Office D. C. Public Schools Presidential Building, Rm. 805 415 12th Street, N. W. Washington, D. C. 20004
June '76 - Aug. '87	Mathematics Teacher Friendship Educational Center 4600 Livingston Road, S. E. Washington, D. C. 20032
Sept. '72 - June '76	Mathematics Teacher Johnson Junior High School Bruce and Robinson Pl., S. E. Washington, D. C. 20020

June '71 - Aug. '72
Mathematics Intern
Urban Teacher Corps
Howard University
Washington, D. C.
Internship at
Langley Junior High School
Washington, D. C.

EDUCATION

M. A.
University of the District of Columbia, 1986
Major: Administration and Supervision

M. A. T.
Howard University, 1972
Major: Mathematics Education

B. S.
Howard University, 1971
Major: Mathematics

AFFILIATIONS

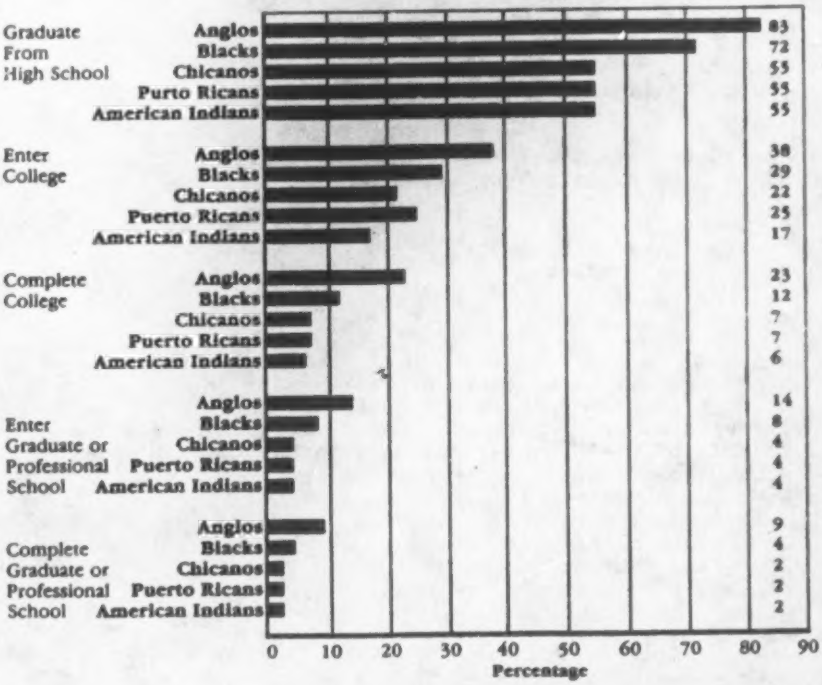
National Council of Teachers of Mathematics
D. C. Council of Teachers of Mathematics
D. C. Alliance of Black School Educators
Association for Supervision and Curriculum Development
Council of Presidential Awardees in Mathematics
Alpha Kappa Alpha Sorority, Inc.
Camp Springs Civic Association
Camp Springs Boys and Girls Club
Boy Scouts of America
Holy Family Catholic Church
Knights of St. John's Ladies Auxilary

PERSONAL

Born - March 14, 1949
ssn. 577-66-8490

Appendix B

The Educational Pipeline in the United States.



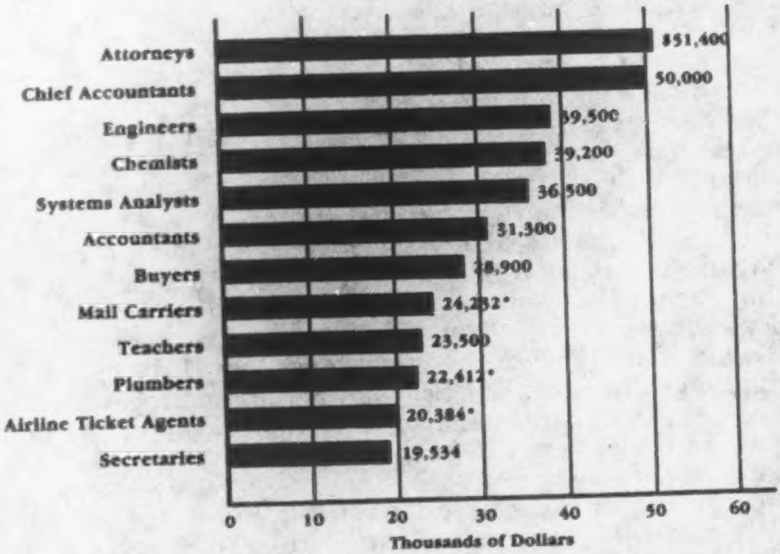
Source: Astin, Alexander W., *Minorities in American Higher Education*, 1982.

At every point along the pipeline minority students drop out of the system at higher rates than non-minority students.

From: A Nation Prepared:
Teachers for the 21st Century

Appendix C

Average Annual Salaries for Selected Occupants
1985



*Based on average annual median weekly earnings

Sources: U.S. Department of Labor, Bureau of Labor Statistics, *National Survey of Professional, Administrative, Technical, and Clerical Pay, March 1985*, 1985, and unpublished tabulations from the Current Population Survey.

Teachers' salaries rank below those of most occupations requiring a college degree, and, in a number of instances, are no better than the salaries that can be earned in occupations requiring only a high school diploma.

From: A Nation Prepared:
Teachers for the 21st Century

The CHAIRMAN. Thank you. I think we'll go through the whole panel, and then we'll come back to some questions.

Mr. Rockefeller.

Mr. ROCKEFELLER. Thank you, Mr. Chairman, Senator Cochran, and Senator Rockefeller. Cousin Jay, thank you especially for your supportive and personal introduction. There could probably an entire other session on the importance of the strength of families in education, but that isn't our subject here today.

I thank the committee for its invitation to testify today and commend the sponsors of this legislation for their commitment to teaching excellence in America's classrooms. The concern expressed in this legislation is shared, I can assure you, by a significant number of America's business leaders and philanthropic institutions, among them the Rockefeller Brothers Fund to which Jay earlier alluded.

I can also testify from my experience as chairman of Recruiting New Teachers, Inc.—RNT we call ourselves—that adopting a national approach to the teacher shortage is not only appropriate given the size, scope, and critical nature of the current teacher shortages, but can be highly effective. Consider the case of RNT. which was formed by a group of education and business leaders, including Richard Munro of Time-Warner, William Woodside of Primerica, Louis Harris of Louis Harris and Associates, Dr. Gwendolyn Baker of the YWCA, National, and John Esty of the National Association of Independent Schools. We formed together to encourage teaching as a career and to raise the esteem of the profession, not only in the eyes of the public, but also in the eyes of the teachers themselves.

Since its launching in April 1988, the campaign cosponsored by the Ad Council has received over 270,000 calls to its toll-free number, garnered more than $30 million in donated advertising, created a data base of nearly 70,000 prospective teachers, 31 percent of whom, I'm pleased to report, are potential minority teachers, and made over 150,000 referrals to more than 200 national recruitment partners, mostly teacher training institutions and school districts.

My colleagues on the RNT board and I feel strongly that the size, composition, and quality of the teaching force are essential ingredients in any meaningful program of education reform. We believe that the Nation's shortage of qualified teachers demands the kinds of innovative solutions and sustained commitment contained in the proposed legislation. Notwithstanding, we hope you will give careful consideration to the adequacy of proposed funding levels therein, particularly with respect to minority recruitment, where unfortunately the severity of shortage dwarfs the monetary commitment currently provided in the legislation.

In addition, Mr. Chairman, we sense that the Nation's decentralized system of teacher recruitment may be creating unnecessary barriers to participation in the profession. A centralized clearinghouse for information about training pathways and job vacancies is a natural alternative to current bottlenecks. National legislation could play a catalytic role creating a job information resource equivalent to the candidate resource RNT has developed.

To sum up, we believe that at the very least RNT's efforts have demonstrated the efficacy of viewing current teacher shortages through a national lens. We now know there is to be tapped an American wellspring of interest in teaching careers. Just as certainly, there is a need for an expanded Federal commitment to financial aid; technical assistance to local districts for recruitment, particularly minority recruitment; significant improvements in teacher preparation, particularly those which will prepare future teachers for urban and multicultural classroom environments; and promising reforms such as professional development academies and school site management. I can attest to the crucial importance of the latter structural and strategic initiatives from my experience on the board of the National Center on Education and the Economy based in Rochester, New York.

I close with the hope that the committee will give careful thought to the lessons of RNT's program. Mr. Chairman, when you introduced the Excellence in Teaching Act, you yourself took note of the $600 million spent annually on Armed Forces recruitment, suggesting the need for similar state-of-the-art measures to enhance the recruitment of teachers. But there is, in fact, little mention in this legislation of the type of national campaign that has been so critical to the success of Armed Forces and Peace Corps recruitment or, for that matter, for our own efforts.

I believe it would be a mistake to neglect the powerful influence that media represents in shaping public attitudes about the teaching profession.

Ultimately, whether one is interested in retrieving the corporate America's cup from the Japanese, or producing better citizens, or empowering the disadvantaged, a better education system will be required. As a Nation, I believe we should spare no effort to establish teaching as an honored and valued profession. I wholeheartedly endorse the legislation's efforts to achieve these ends.

Mr. Chairman, if time permits at the end of this session, or whenever the committee is so disposed, we have available a videotape of RNT's current ad starring Edward James Olmos in clips from the most stirring film, "Stand and Deliver."

Thank you.

[The prepared statement of Mr. Rockefeller follows:]

Prepared Statement of David Rockefeller, Jr.

Mr. Chairman, I want to thank the Committee for its invitation to testify today and commend the sponsors of this legislation for their commitment to teaching excellence in America's classrooms. The future vitality of America as an economic power and a democratic society depends upon dramatic improvements in the performance of its educational system and the knowledge and skills of its citizenry. Together, the Excellence in Teaching Act and the National Teacher Act provide important national recognition of the strategic role that teachers must play in meeting the challenges facing our society in a global economy.

From my own meetings and travels, I know that the concerns expressed in this legislation are already shared by a significant number of America's business and philanthropic leaders. For example, the focus on teacher education reform is one shared by many of the nation's foundations, including the Rockefeller Brothers Fund which I chair.

I can also testify from my experience as chairman of Recruiting New Teachers that adopting a national approach to the teacher shortage not only is appropriate given the size, scope, and critical nature of current teacher shortages -- but can be highly effective. Consider the results we've achieved. In 1986 a group of education and business leaders -- among them Richard

Munro of Time, Inc., William Woodside of Primerica, Louis Harris of Louis Harris and Associates, Dr. Gwendolyn Baker of the YWCA, and John Esty of the National Association of Independent Schools (NAIS), -- formed a privately-funded drive to encourage teaching as a career and raise the esteem of the profession. We were motivated by many of the issues noted in your findings to produce a national public service campaign on behalf of teaching. RNT's public service advertisements, co-sponsored by the Ad Council, portray teaching as a powerful and influential career. In fact, the campaign theme is "Reach for the Power: Teach".

Simply put, the campaign has spurred an extraordinary groundswell of interest in teaching careers. Since its appearance in April, 1988 we've received over 270,000 calls to our toll-free number (1-800-45-TEACH). The campaign has garnered far more than $30 million in donated advertising on television, cable, radio, and in print. In annual dollar value alone, this total matches that of Tide or Avis -- not an inconsiderable contribution to the status of teaching given the pervasive influence of media in forming public opinion. Not surprisingly, RNT has been endorsed by virtually every major education group, including the National State Teachers of the Year, the American Association of Colleges of Teacher Education (AACTE), and the Educational Leaders Consortium.

But beyond influencing attitudes, the RNT ads are a call to action. Every caller receives an informative brochure describing opportunities and pathways into the teaching profession. Close to 70,000 questionnaires contained in the brochures have been returned to us with details about the respondent's background, education, and teaching interests. Significantly, 31%, or over 20,000, of these respondents are potential minority teachers. Over half are potential second-career entrants to the profession.

More than 200 organizations and institutions have been receiving printouts from our database listing respondents and their areas. These "Response Partners" are currently contacting RNT respondents and inviting them to apply for education and training programs, attend job fairs, interview for teaching positions, or furnishing them with additional information about pathways into the profession. To date, the campaign has made over 150,000 referrals from its database.

In 1990, we began making additional resource materials on the teaching profession available to the potential teachers we identify. These include packages on teacher education/financial aid, certification, alternative/mid-career, minority opportunities and how to find a teaching job.

Finally, we will soon be launching a poster campaign geared toward promoting the teaching profession in each of the nation's 20,000-plus high schools. This effort should generate its own database of college-bound respondents.

RNT respondents are very much a cross-section of the American population, representing stock brokers and grocery store clerks; students and legislative aids; former teachers returning to the work force and business executives pursuing a life-long dream of a classroom career. It's an extraordinary outpouring in response to a national call to service.

My colleagues on the Recruiting New Teachers Board and I feel strongly that the size, composition, and quality of the teaching force are essential ingredients in any meaningful program of education reform. We believe that the nation's growing shortage of qualified teachers demands the kinds of innovative solutions and sustained commitments contained in the legislation. Notwithstanding, we hope you will give careful consideration to the adequacy of proposed funding levels, particularly with respect to minority recruitment where, unfortunately, the severity of shortages dwarfs the monetary commitment provided in the legislation.

In addition, we sense that the nation's decentralized system of teacher recruitment may be creating unnecessary barriers to participation in the profession. A centralized clearinghouse for information about pathways into the profession and job vacancies is a feasible alternative to current bottlenecks. National legislation could play a catalytic role in its development, creating a demand-side resource equivalent to the supply-side solution RNT has pioneered.

Finally, we believe that at the very least our efforts have demonstrated the efficacy of viewing current teacher shortages through a national lens. There is a well-spring of interest in teaching careers to be tapped. Just as certainly, there is a need for an expanded federal commitment to financial aid; technical assistance to local districts regarding recruitment (particularly minority recruitment); significant improvements in teacher preparation -- particularly those which will prepare future teachers for urban and multi-cultural classroom environments; and promising reforms such as professional development academies and school site management. Indeed, my experience on the board of Rochester, New York's National Center on Education and the Economy has convinced me of the crucial importance of this last set of initiatives.

We also hope that the committee will give careful thought to the lessons of our program. Mr. Chairman, when you introduced the Excellence in Teaching Act you took note of the $600 million spent on armed forces recruitment, suggesting the need for similar state-of-the-art measures to enhance the recruitment of teachers. Beyond it's call for the Secretary of Education and state education agencies to publicize the existence of programs that would be created under this legislation, there is little mention of the type of national campaign that has been so critical to the success of armed forces recruitment or, for that matter, Peace Corps recruitment.

We make no secret of having patterned our own efforts after the Army's "be all that you can be" campaign, or the Peace Corps' "the hardest job you'll ever love" public service advertisements. The results of our national media efforts (and theirs) speak for themselves. It would be a mistake to neglect the powerful influence that media has in shaping public attitudes about the profession.

Ultimately, whether one is interested in retrieving the corporate America's cup from the Japanese, producing better citizens, or empowering the disadvantaged, a better education system will be required. As a nation we should spare no effort in making teaching an honored and valued profession. We wholeheartedly endorse the legislation's efforts to achieve these ends.

The **CHAIRMAN.** I think that's just a minute or so, isn't it?

Mr. **ROCKEFELLER.** I believe the ad is just 60 seconds.

The **CHAIRMAN.** Do you want to show it now?

Mr. **ROCKEFELLER.** I'd be delighted to.

The **CHAIRMAN.** Good.

[Videotape shown.]

The **CHAIRMAN.** An excellent ad. Is this the one you use? Do you have others, too?

Mr. **ROCKEFELLER.** This is the most current one. We had a previous ad that began to wane in effectiveness, and we put this one in.

The **CHAIRMAN.** Good.

Dr. Hatton.

Dr. **HATTON.** Good morning, Mr. Chairman. I'm very pleased to be invited to provide testimony this morning. I work with a number of others to restore equity in the teaching profession as we work on teacher professionalism in many different activities in which I participate, and so it was particularly gratifying to me to see this special attention to minority teacher recruitment in the bills before the committee.

This, Mr. Chairman, is a difficult and sensitive issue, the issue of minority teacher recruitment, and I think that's why it has not really attracted the enthusiasm of the many educational leaders who are working to rebuild our teacher work force today. I think national attention is highly appropriate to this issue at this time if, in fact, we are to enhance the quality of education as we rebuild the teacher work force and if we are to rebuild that teacher work force in ways that will enhance the quality of education.

Many people accept the fact that we ought to have more talented minority teachers—with emphasis on "more"—for reasons of equity alone. And I think the arguments that I understand that support people in this view is basically because the reason we have this shortage is due to the declining college participation rates of minority groups. There are clearly more attractive careers, as Al Shanker told you about earlier. There are clearly screening measures. But the basic fundamental cause is that we have not achieved our goals for providing access and equity in higher education in this country. A smaller proportion of the minority community graduates from college today than was the case 10 years ago. All U.S colleges and universities together graduate only about 100,000 minority students each year; barely ten percent of these earn degrees in education. The most highly talented of these education graduates are aggressively recruited to other fields, and the remaining pool is then diminished by the screening measures we use in teacher certification processes. Thus, the current system, if left to its own devices, will continue to produce a smaller minority college population, and this smaller college population will yield few minority teachers. To reverse this trend which is caused by some fundamental problems in our educational system, we must intervene positively to increase minority access to better preparation and support. The catch, Mr. Chairman, is that if we could do this miraculously tomorrow, if we could improve the pre-collegiate education of minorities tomorrow, it would take a generation to see the effects and achieve equity in the teaching profession.

But we cannot wait for another generation. We must have a critical mass of minority teachers in our schools today. At issue is our effectiveness in educating an increasingly diverse population. The evidence for this assertion is compelling. A growing body of research indicates that a culturally diverse teaching force can enhance the effectiveness of our classrooms. We know from this research that particularly low-achieving minority students are more teacher-dependent, are more likely than middle-class students to hold teachers in high esteem, and are more directly affected by teacher expectations than white pupils. A multiethnic teaching force is more likely to have teachers who can or will learn to communicate effectively with children from diverse cultures, particularly since minority teachers often motivate their white colleagues to change negative racial or cultural stereotypes. More importantly, to the extent that minority teachers hold more positive expectations for lower-achieving minority students who hold them in high regard—it's a little more complicated than most people usually say—such teachers are likely to find ways to help these youngster develop capacities for self-direction and problem solving.

Simply put, this means that we must have better teaching; our students must be taught by teachers who believe that they can learn; and we must build a new teacher work force characterized by both competence and broad diversity.

The legislation before you recognizes this need, I believe, and particularly emphasizes the need to increase the minority teacher pool. In particular, S. 1675 recognizes the magnitude of the problem and its fundamental causes by giving both attention to the need to recruit minority teachers as well as to provide cultural and gender sensitivity instruction for practicing teachers. Since our educational systems have historically failed to provide adequately trained teachers in schools serving the urban and rural poor, the lack of minority teachers compounds the existing situation in these systems. Al Shanker talked about the way we hide our shortages earlier this morning. And so the twin focus on both minority recruitment and professional training is essential to having any appreciable impact in areas serving the urban and rural poor.

From my perspective, S. 1675 in particular has the potential to create a new pool of highly talented minority teacher candidates. It provides for intervention at critical points in the teacher education pipeline by encouraging joint projects of schools and colleges focused on academic preparation for college, by enhancing the teaching programs at colleges preparing the largest numbers of minority teachers, and by promoting better understanding of successful efforts to increase minority participation in the teaching profession. But we should not delude ourselves about the sufficiency of these provisions. To the extent that they serve to create programs which stand in isolation from the programs supported through Title I of this bill, the full potential of this effort will not be realized. I strongly urge additional attention to the need for tighter linkage between the minority recruitment effort and the Teacher Corps programs to be organized through these provisions.

In other words, if you do not provide for some linkage between the minority teacher recruitment effort, whether you do it through pool-building strategies or paraprofessional training, as is the case in one of the other bills, you will simply provide a minority cul-de-sac which will not be sufficient enough or strong enough in the pipeline propulsion that you will have started in the pool to overcome the barriers to participation in the teacher work force. So there should be linkages between the minority recruitment effort and the Teacher Corps programs in the other title of the bill.

In this way, the provisions of Title III, the minority recruitment effort, if adequately funded to begin, are likely to have even wider effect on the teaching population of our schools.

I would have similar comments to make about the proposed study of alternative ways to increase the number of minority teachers because this has tremendous power to stimulate our States and local systems to work on this problem. I envision that an array of model programs will be established through the provisions of Title III. And if the proposed study reveals the successful experiences of these programs in planning, training, and program development, such efforts, local and State efforts, will have more guidance as they develop responses to the problem.

In conclusion, let me simply urge support and even more critical attention to those provisions for minority teacher recruitment. I wish I had time to talk about other areas of the bill. I think they're extremely important. I think they will bolster and broaden the impact of all of the ongoing efforts to raise the status of the teaching profession. But I would turn once again to urging your support for those provisions devoted to minority teacher recruitment. The need in this area is so great that we could hardly do too much.

Thank you, Mr. Chairman.

[The prepared statement of Dr. Hatton follows:]

Statement of Barbara R. Hatton
Hearing on Teacher Excellence: Recruitment and Training
Senate Committee on Labor and Human Resources

January 30, 1990

Introductory Remarks

Thank you for inviting me to give testimony in this hearing on teacher excellence. I am Barbara Hatton, Deputy Director of the Education and Culture Program at the Ford Foundation. As you may know, the Foundation has long supported efforts to improve the recruitment and preparation of teachers as one of the most effective means to enhance the quality of education in the nation's schools. Current Foundation programs include a recently established initiative to identify and prepare highly qualified minority teachers. Among my several duties, I provide leadership for this program. My comments today focus upon the potential of the proposed legislation to address the minority teacher shortage.

For me and the many others who work to restore equity in the teaching profession as we work to enhance teacher recruitment, preparation, and professional development, it is gratifying to note the special attention to minority teacher recruitment in the legislative proposals. Because this is a difficult and sensitive issue, it has not attracted the enthusiasm of those who would rebuild our teacher workforce. But the lack of minority teachers is one of the most critical issues to be resolved if we are to enhance student learning through changes in the quality and composition of the teacher workforce.

The Significance of the Minority Teacher Shortage

Many accept the fact that we should have more talented talented minority teachers for reasons of equity alone. More than any other factor, the shortage of minority teachers is caused by the declining college participation rates of minority groups. We have not achieved our goals for providing access and equity in higher education. A smaller proportion of the minority community graduates from college today than was the case ten years ago. All U.S. colleges and universities together graduate only 100,000 minority students each year, only 10 per cent of whom have earned degrees in education. The most highly talented of these education graduates are aggressively recruited to fields other than teaching. The remaining pool is further diminished by the screening measures used in teacher certification processes. Thus, the current system, left to its own devices, will continue to produce a smaller minority college population, yielding few minority teachers. To reverse this trend, we must intervene positively to increase minority access to better preparation and support. The catch is that, even if the pre-collegiate education of minorities were miraculously improved today, it would take a generation to see the effects and achieve equity in the teaching profession.

But we cannot wait for another generation. We must have a critical mass of minority teachers in our schools today. At issue is our effectiveness in educating an increasingly diverse student population. The evidence for this assertion is compelling. A growing body of research indicates that a culturally diverse teaching force can enhance the effectiveness of the educational environment, particularly for low-achieving minority students.

From this research, we know these students are more teacher-dependent, are more likely than middle-class students to hold teachers in high esteem, and are more directly affected by teacher expectations than white pupils. A multi-ethnic teaching force is more likely to have teachers who can or will learn to communicate effectively with children from diverse cultures, particularly since minority teachers often motivate their white colleagues to change negative racial or cultural stereotypes. More importantly, to the extent that minority teachers hold more positive expectations for low-achieving minority youngsters who hold them in high regard, such teachers are likely to find ways to help these youngsters develop capacities for self-direction and problem solving.

Simply put, this means our students must be better taught by teachers who believe that they can learn. Therefore we must build a new teacher workforce characterized by both competence and broad diversity.

Potential Impact of the Proposals on Minority Teacher Supply

The proposed legislation recognizes this need and emphasizes the need to increase the minority teacher pool. In particular, S. 1675 recognizes the magnitude of the problem by giving attention to both the need to recruit minority teachers throughout the provisions of the bill, but particularly in Title III, as well as to provide cultural and gender sensitivity instruction for practicing teachers through the provisions of Title II. Since educational systems have historically failed to provide adequately trained teachers in schools serving the urban and rural poor, the lack of minority teachers compounds the existing situation in those systems. And the twin focus on both minority recruitment and professional training is essential to having any appreciable impact in these areas.

From my perspective, Title III of S. 1675 has the potential to create a new pool of highly talented minority teacher candidates. It provides for intervention at critical points in the teacher education pipeline by encouraging joint projects of schools and colleges focused on academic preparation for entrance to and success in college, by enhancing the teaching programs at colleges preparing the largest numbers of minority teachers, and by promoting better understanding of successful efforts to increase minority participation in the teaching profession. But we should not delude ourselves about the sufficiency of these provisions. To the extent that they serve to create programs which stand in isolation from the programs supported through Title I of the bill, the full potential of this effort will not be realized. I strongly urge additional attention to the need for tighter linkage between the minority recruitment efforts and the Teacher Corp programs to be organized through these provisions. Steps should be taken to ensure the steady flow of the new pool of minority teacher education candidates into the new teacher preparation and placement programs. In this way, the provisions of Title III, if adequately funded to begin, are likely to have even wider effect on the teaching population of our schools.

Similarly, the proposed study of alternative ways to increase the number of minority teachers may stimulate a more permanent commitment from our states and local systems. I envision that an array of model programs will be established through the provisions of Title III. If such a study reveals the successful experiences of these programs in planning, training, and program development, such information will provide guidance to educators and policymakers as they develop responses to the minority teacher shortage.

Closing Remarks

The provisions of the proposed legislation represent goals worth pursuing. They will bolster and broaden the impact of all of the ongoing efforts to raise the status of the teaching profession. They recognize the need to restore equity in the teaching profession. I particularly urge support and even more critical attention to those provisions for minority teacher recruitment. The need is so great that we could hardly do too much.

Thank you once again for the opportunity to make these comments.

The CHAIRMAN. Thank you very much, Dr. Hatton. We hope you have in your testimony your comments on the other provisions of the bill. We value those very highly.

Ms. Brownley, you've had a very distinguished career in teaching, received all kinds of awards and recognition, and have demonstrated great proficiency in the classroom, and are universally recognized. What's your own real kind of assessment about the barriers to not attracting and being able to hold minority teachers?

Ms. BROWNLEY. As far as the barriers of not attracting and holding teacher, it is first of all getting the minority students through college to get their education to become a teacher. I've had several students from Friendship to go on and graduate from high school with honors, but they could not afford to go to college. So this is one of the points of the bill that I was really excited about when I heard that, because, again, these students will be excellent teachers and excellent role models that are coming through school now.

Then, again, students if they do make it through college, industries and other professions are grabbing minority students up to do other things besides coming into the classroom.

The CHAIRMAN. Do you have any impression about how minority teachers are treated in the education system that we ought to be addressing? Is there anything that we should know? You've gone through it all, from Teacher Corps to being a well-recognized teacher in terms of the kinds of experience that you've had.

Ms. BROWNLEY. One concern that is coming up is testing, and there have been concerns about testing minority students from kindergarten all the way through school. So now with the proposals coming forward to test teachers, there is a concern, and it was mentioned earlier in somebody else's testimony. But, again, there are a lot of things that can be done in teacher education programs to prepare the minority students to be ready to take the test and perform just as well as anybody else.

The CHAIRMAN. You're suggesting that there are some real concerns about those kinds of tests that are being administered.

Ms. BROWNLEY. Yes.

The CHAIRMAN. If we're able to find some other paths, the way that Mr. Shanker talked about, that could still assure quality teaching.

Ms. BROWNLEY. Right.

The CHAIRMAN. And nonetheless we ought to be exploring these in a more systematic way.

Ms. BROWNLEY. Yes, because we still don't want to lower the standards.

The CHAIRMAN. Mr. Rockefeller, let me just keep moving on. Are you able to track those that call in to the service and find out whether these individuals or volunteers actually get on a path for teaching?

Mr. ROCKEFELLER. Yes, Mr. Chairman. We are just beginning. We are a young enough enterprise so that the tracking is just beginning to show results. We're doing evaluation this spring. We should have results beginning in the early summer that indicate the level of success of this campaign of actually converting these call-ins to either hirings or enrollments. At this time, we simply don't have enough data on that. We have anecdotal data suggesting that the connections are being made, but we don't have the final figure.

The CHAIRMAN. You've obviously been involved in a lot of philanthropic undertakings. Do you have any suggestions of things that we ought to be looking at in terms of this legislation that could encourage them? I'm sure that we're thinking in those terms in the drafting of the legislation. You've given us an example of a successful program. I don't know if there are other things that we ought to be thinking about in terms of the legislation. You know what the focus is. Do you have some other suggestions, or do you want to supply them to us?

Mr. ROCKEFELLER. I'd be delighted to do so at a later date, but I think collaboration between public sources and private sources is clearly called for. I think all the testimony that I've been hearing this morning and other information suggests that enormous resources are not going to be forthcoming from either public or private units, and collaboration, I think, is going to be very important.

I'm aware of some new foundations just coming onstream that are very interested in this area and would be delighted, I know, to become collaborators. We'd be delighted to supply that information to you.

[The information referred to follows:]

LETTER TO SENATOR KENNEDY FROM MR. ROCKEFELLER

February 15, 1990.

Senator EDWARD M. KENNEDY,
U.S. Senate,
Washington, DC 20501

DEAR TED: Thank you for your kind note in regard to the January 30 teacher hearings. It was a great honor to be able to provide the Committee with testimony regarding Recruiting New Teachers, and I was particularly impressed by your commitment to the legislation and command of the issues addressed in the bills. As I hoped to convey in my brief testimony, we stand ready to provide whatever help we can to your efforts to improve the quality and size of America's teaching force.

At the hearing you requested that I supply the Committee with additional suggestions regarding ways in which the legislation might encourage greater public sector collaboration with private philanthropy and the corporate world. As you know, Title II of S. 1675 (Professional Development Academies) already provides Federal cost-sharing provisions. However, these seem designed to leverage State rather than private contributions.

Perhaps such provisions could be expanded to attract private sector matching contributions and extended to other parts of the legislation, particularly Title III (Minority Teacher Recruitment), and Title VIII (School Based Management/Shared Decisionmaking Incentive). One example of the kind of collaboration I have in mind can be found in the U.S. Bureau of Maternal and child Health's Healthy Tomorrows Partnership for Children (modeled on Illinois' Ounce of Prevention Fund), a federally administered program requiring matching support from community sources for its programs. Another example is the proposed Federal funding for the National Board for Professional Teaching Standards, which is to be matched by private sources.

With respect to Title II and Title VIII (Professional Development Academies and School Based Management/Shared Decisionmaking), you might consider expanding the legislation to enable funding of inter-state consortia. Linking key restructuring activities around the country would be a useful vehicle to pool knowledge and experience while accelerating dissemination and replication of field proven reforms. This is another instance in which the legislation might require specific levels of private support as part of the application procedure.

Additionally, as indicated in my testimony, at present the legislation provides no role for the kind of broad-based national effort that Recruiting New Teachers represents. The media is an obvious tool for raising esteem and interest in the teaching profession. The legislation could be made more explicit on this point, directing the Secretary to develop or found an appropriate media campaign that complements the Act's programmatic focus.

On a somewhat related issue, I know that my associate David Haselkorn, Recruiting New Teachers' Executive Director, has recently supplied Terry Hartle with further information regarding the teacher job clearinghouse I mentioned in my testimony. The clearinghouse concept strikes us as completely consonant with the legislation's objectives. I hope you will consider it.

Once again, I am delighted that you are focusing on all of these issues. If I can be of any assistance to you or the Committee in your efforts to improve American education I would welcome the opportunity to be of service.

Yours sincerely,

DAVID ROCKEFELLER, JR.
Chairman

The CHAIRMAN. Good. That would be helpful.

We are slow, with the exception of the military, to designate funding for media attracting or achieving public policy. In spite of the AIDS Commission report about using media, we don't do that. We don't provide counter-advertising in tobacco. But we just go to bat when it comes to the recruitment for the Armed Services, and it's been very successful, a dramatic increase in expenditures in that area.

Do you have some suggestions about whether we can do more in terms of the media in achieving the objectives of the bill, too?

Mr. ROCKEFELLER. Yes, sir. I think that there would be opportunities to provide the Secretary of Education, whom I believe is very interested himself in this area, to make grants in this sphere. And what we've discovered, we're only a million-dollar-a-year enterprise, and we're generating $30 million of free space. We believe that enterprises such as ours—and there are others State by State that we're aware of in the Nation, which have had a very positive effect. I think as with many such efforts, critical mass is very important. And I believe that with some incremental funding for efforts of this kind, perhaps aimed through the Department of Education, we will be able to achieve and really turn around both the self-image of teachers and the image that exists in the land.

I'm afraid for the last couple of decades parents have recoiled too often with horror at hearing their children were proposing to undertake a teaching career. That isn't how it used to be. In my view, it isn't how it should be.

The CHAIRMAN. Dr. Hatton, Ms. Brownley mentioned these tests, standardized tests, as being an impediment. I don't know if there's something else that you might add as to alternative mechanisms to standardized testing that you think we ought to be more sensitive to.

Dr. HATTON. Well, there are a number of ongoing efforts to design new ways to assess teaching competence. What we're using now are paper and pencil tests and arbitrary cutoff scores for screening into the profession. So there are other measures being developed in the country to develop actual teaching competence.

One of the best ways, while those measures are under way and while those efforts are under way, is simply to better prepare students. I'm one of those who believes that well-prepared minority students will pass any test—bad test, good test, wrong test or right test. I think if they're well prepared way beyond the minimum levels of the test, which are minimum criteria, they're not, as Mr. Shanker said, very—they do not subscribe to very high standards. If we would give our students better preparation in our preparation programs now, they will overcome these obstacles. The tests will not be obstacles to them.

I have some experience in working through these kinds of problems. It's not easy. It is very difficult in situations where people do not have proper resources to work on these problems. But I do think it is possible, and I think that we should devote more resources. And I think there are provisions in this legislation which would help us to do that.

I think the best way to approach that is simply give our students better preparation.

The **Chairman**. Good. Maybe you'd just address what Ms. Brownley said earlier, too, that is the financial impediments for continuing in the field of education. As you've seen in the legislation, we are providing the scholarships with the payback provisions through the revival of the Teacher Corps. That was one of those old programs from the 1960's that we got started and that worked. It was abandoned, and we're trying to come back to it a bit, benefiting from the lessons of it. But can you just speak to the financial impediment and whether you think that providing those kinds of payback provisions would be useful and helpful in terms of attracting talented young minority students?

Dr. **Hatton**. Oh, no question about it. In the foundation's program, we are encouraging our grantees to experiment with alternative ways to use financial support to promote progress and retention of students and teacher education programs.

It's no secret that the shift of our aid from grants to loans has had a tremendous impact differentially on minority college populations in going to college and in making it through college. The students are having to load up with loans. Anything that can reduce the debt burden that students have to bear in seeking college degrees would be helpful for teaching as well as some of the others, and we ar encouraging our grantees to experiment with alternative ways to do that.

I think the college population is very sensitive, the minority college population is very sensitive to this kind of loan forgiveness or debt reduction impact that we're trying to learn more about. But I think the sensitivity to that dimension of it is very high, and that the response to that will be quite good.

The **Chairman**. Senator Cochran.

Senator **Cochran**. Mr. Chairman, thank you very much.

I noticed that some have commented one way to try to deal with shortages of teachers in critical areas such as math and science, special education and maybe some others, may be to consider paying them more to entice, to be incentives, to be an incentive system. Ms. Brownley, what do you think of that? Is that something that would be workable or not?

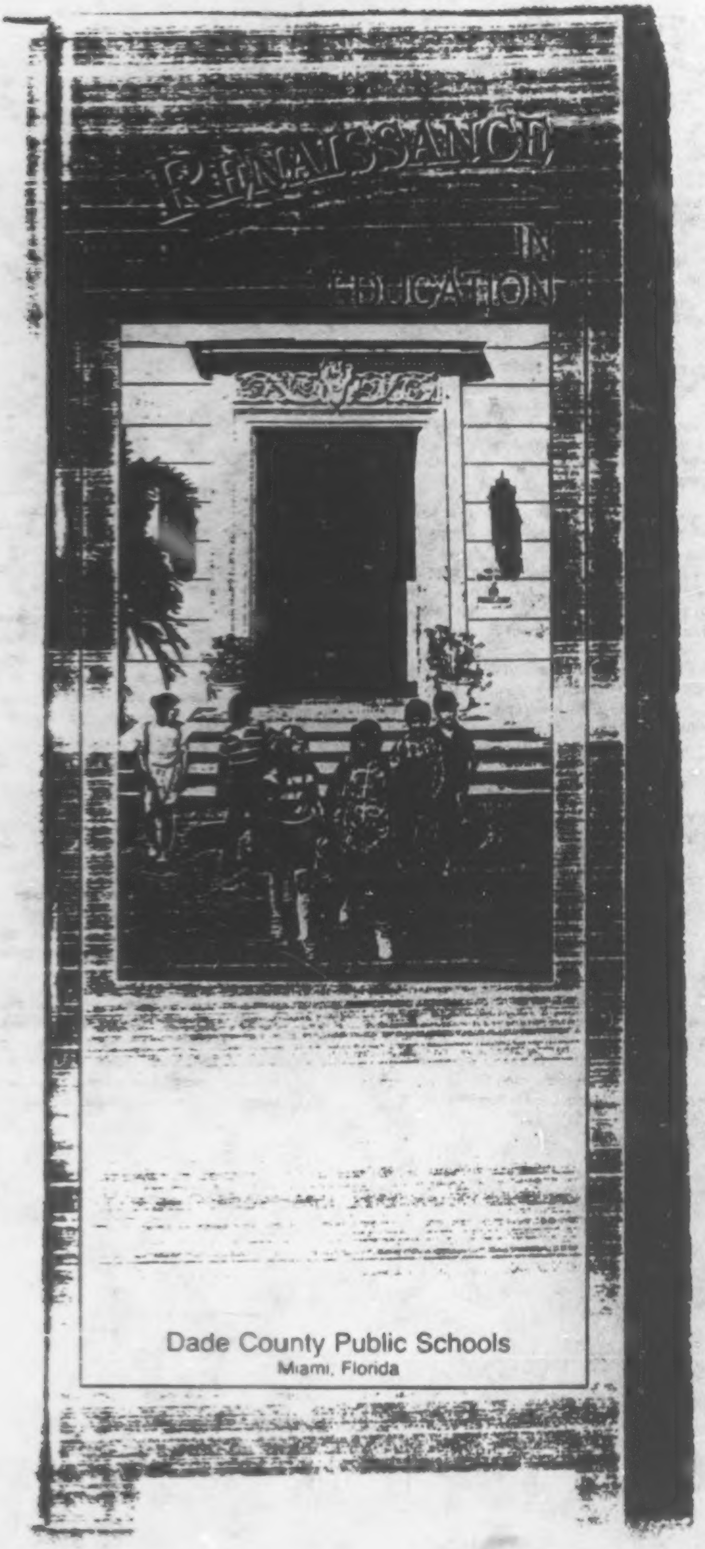
Ms. **Brownley**. Well, higher pay will be an incentive to anybody in any profession and definitely in teaching, yes.

Senator **Cochran**. I was curious about what the other teachers might think about it, though, too. If there were higher pay being offered for just some of these teacher shortage areas like math and science, would the other teachers end up trying to block that, or would that be acceptable? There have been some programs, I understand, where it's been tried, and I'm just curious. Does anybody on the panel know about whether these have been tried with any kind of success?

The CHAIRMAN. I would mentioned we had Dr. Fernandez in that Dade County program which they have with the teacher managed program, where they have gone now. They're going up, I think, in excess of $60,000 a year, and this has been worked out with the teachers themselves. They've been making other kinds of adjustment in terms of the total number of personnel to try and get a bigger bang both from math and science but also to sort of look out after some of the other teachers' concerns in some of the other courses. But it appears it's going to have to be evaluated, but it's been a very interesting and exciting undertaking down there.

I'd ask the staff maybe to just prepare—we have a staff member that knows that particular situation very well. We'd be glad to get it over and make it part of the record.

[The information referred to follows:]



RENAISSANCE
IN
EDUCATION

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Dade County Public Schools
Miami, Florida

HISTORICAL PERSPECTIVE

Built on a foundation of trust and nurtured by a series of significant accomplishments over several years, the Professionalization of Teaching/Education movement in Dade County has its roots in the early 1970s. It was at that time that the first negotiated agreement between Dade County Public Schools and the United Teachers of Dade (the teachers' exclusive bargaining agent) resulted in creation of a series of joint management-union task forces that met during the year to address mutual issues and concerns.

From those deliberations evolved a pattern of creative ideas and joint recommendations, including formation of teacher-faculty councils at each school site which served as advisory boards for principals. Such collaborative relationships led naturally into one of the most successful meritorious school programs in the nation, the Quality Instruction Incentives Program (QUIIP).

With the success of QUIIP, and numerous other positive outgrowths of joint interaction and problem-solving during more than a decade of cooperation, the joint Professionalization of Teaching Task Force was formed in 1985 to meet the challenges outlined in a number of national educational reform reports, including the Carnegie Foundation's *A Nation Prepared*. Co-chaired by the Superintendent of Schools Dr. Joseph A. Fernandez and the United Teachers of Dade Executive Vice President Pat Tornillo, the Professionalization Task Force was established to create a blueprint for achieving restructured professional environments districtwide in which teachers and administrators could continually work together to improve educational programs and student achievement.

> “We dare to dream, to take risks; that has put Dade County on the cutting edge of educational reform.”

Joseph A. Fernandez
Superintendent
Dade County Public Schools

Today, the district's professionalization initiatives have grown beyond anyone's original expectations. Thirty-three school staffs are totally involved in a nationally recognized School-Based Management/Shared Decision-Making experiment which encourages school-site and problem-solving creativity by empowering teachers and administrators. A second group of schools will begin a similar pilot prog during the 1989-90 school year.

Another 12 schools are involved in a collaborative Partners in Education project. They, too, are utilizing a shared decision-making approach, but have included an added dimension of parent, business, and community input into the operation and oversight of their schools.

Faculty councils at all other schools throughout the county have also matured and are no longer limited to an advisory role. Accordingly, principals and union stewards, along with elected representatives of each faculty, together make decisions on the total educational programs of their individual schools.

> “Our landmark labor contract sends a clear message — teachers are professionals.”

Pat Tornillo
Executive Vice President
United Teachers of Dade

Teachers also now sit on district committees to design new schools. Some are directly involved in a pilot program for evaluating school principals. Selection of all principals and assistant principals in the district includes interviews by teachers; their assessment of administrator candidates contributes heavily in the final decision on appointment.

An entire school area (with approximately 60 schools) has been reorganized to extend the shared decision-making concept to feeder patterns, or families, of neighborhood schools; in this project, teachers, administrators, parents, representatives of the business community, and students participate in planning, developing, and implementing educational policy decisions.

Clearly, the atmosphere in Dade County has encouraged teachers and administrators to dream, to create a vision of the future. Another manifestation of such vision is the satellite learning center concept. Begun first in Dade County, these centers are the nation's first schools at the workplace. Three such satellite centers are now in operation, with many more corporations and community organizations expressing interest.

Teachers in Dade also enjoy the benefit of a number of substantive professional growth initiatives, including programs such as: the Dade Academy for the Teaching Arts; the Teacher Education Center; and a teacher career ladder, which will be implemented next year.

Teachers directly involved in professionalization activities and others who are observing and documenting results are extremely pleased with the progress underway. They say schools have never been better. Morale, student achievement, creativity, energy, and goodwill are on the rise. Teachers feel better about being teachers and students are the beneficiar

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MAJOR INITIATIVES

NEW DIRECTIONS

NEW ROLES FOR TEACHERS

12 PROFESSIONAL DEVELOPMENT

15 PROFESSIONALIZING THE WORK ENVIRONMENT

17 ATTRACTING AND RETAINING THE BEST

20 PARTNERSHIPS

22 ORGANIZATIONAL/PLANNING STRUCTURE

MAJOR INITIATIVES

While the seeds of professionalization in Dade County were planted in the early 1970s, visionary development and growth of the program took hold in 1986 with implementation of several major centerpiece initiatives.

Focussing on decentralization of the school system in order to improve the quality of instruction, these initiatives range from work site decision-making to schools at the work place.

School-Based Management/ Shared Decision-Making

The flagship effort of the professionalization movement in Dade County is the School-Based Management/Shared Decision-Making pilot program, now in its second year of implementation in 33 schools.

Thoughtful discussion among an entire school staff results in unique school improvement and shared decision-making models that fit the needs of each school, opening the door for innovative school governance. The full partnership of teachers and administrators provides a feeling of ownership in what they do and gives creative pause to the consequences of their decisions.

Decentralization of decision-making has revolutionized many previously rigid policies, programs, and procedures. Each school has begun to reflect the "culture" and specific needs of the community it serves, rather than the broadstroke effect that characterizes many large, impersonal schools and school systems.

School-Based Management/Shared Decision-Making is more than just budget decentralization; although this is a major factor in moving the decision-making process from a central or area office to the school level. Areas of focus include curriculum and program planning, collegial-type decision-making, and strategic planning as a vehicle for improving school-centered programs and establishing priorities. It fosters better utilization of the full resources of the school system at the school level in allowing important decisions to take place at this level so that the best education possible can be realized for all students.

Schools participate on a voluntary basis and develop their own shared decision-making model. These models vary from school to school reflecting the unique nature of individual school staffs and student populations.

Teachers and administrators are reassessing priorities, resulting in significant changes in how discretionary funds are spent. They have developed complete new programs for specialized instruction. In some schools they have redefined responsibilities and positions, creating new jobs and eliminating others.

Under district and union guidelines, participating schools receive the same level of funds as other schools in the school system. It is how they use that money that makes the difference.

Parents and other community representatives also participate in the school's decision-making as advisors and as supportive, helpful partners.

The pilot program urges school staffs to dream. It was designed so that teachers and administrators do not encounter obstacles in their search for the quintessential formula that makes their schools the best they can be. Schools wishing to modify particular school board rules or contractual provisions seek waivers of those rules. The school board and the union have been willing to take risks in order to approve such waiver requests.

The success of the initial pilot has paved the way for establishment of a second pilot group of schools. The planning year for this begins during the 1988-89 school year, with implementation in 1989-90.

Partners In Education

A five-year experiment launched in 12 inner city schools during the 1987-88 school year, called Partners in Education (PIE), brings together the valued combination of Dade County Public Schools, the United Teachers of Dade, the Urban League of Greater Miami, Miami-Dade Community College, and the Mitchell Wolfson Sr. Foundation. These partners are working with the schools to reduce the dropout rate among at risk students and to raise students' achievement levels.

A five-member committee has been established at each PIE school (comprised of the principal, assistant principal, union steward, and two teachers elected by the faculty) which develops proposals that the entire school staff implements.

Saturday School

Born out of a school-based management/shared decision-making proposal from one of the Partners In Education schools, voluntary Saturday morning classes are now a reality in more than 20 of Dade's public schools. Offering a relaxed atmosphere and a host of educational computer games and musical instruments, students attend Saturday classes to improve their mathematics and reading skills.

This program received national attention last year when former U.S. Senator Lawton Chiles touted the idea as one successful approach to reducing the dropout rate. This year, federal monies have been provided to enable 67 elementary schools the option of offering Saturday classes to their Chapter I students.

Satellite Learning Centers

Running a school at the workplace. It's a revolutionary idea that Dade County Public Schools launched during the 1987-88 school year, along with the United Teachers of Dade.

Satellite Learning Center schools are operated by Dade County Public Schools in a facility constructed and paid for by a host corporation.

The nation's first such school opened last year to serve the kindergarten-age children of employees of American Bankers Insurance Group's corporate headquarters, located in Miami. This year, the program expanded to grade one; in 1989, it expands to grade two.

Since then, two more Satellite Learning Centers have opened: one at Miami International Airport for the children of airport employees, the other at Miami-Dade Community College (North Campus) for children of employees, as well as students, who attend the college.

In addition, several new agreements with companies throughout Dade County are now in the works. Interested employers range from hospitals and banks to an industrial park complex of more than 50 private-sector firms, which has expressed interest in constructing an entire satellite learning school for children of their employees.

A lead teacher is in charge at each Satellite Learning Center, who works with the principal of a nearby (host) school. Children of the satellite learning center participate in school assemblies and other activities with students at the host school.

For the school system, the satellite helps ease transportation costs and overcrowding while improving student integration by reflecting the commonly heterogeneous population of parents' work environments. It also encourages better communication between parents and teachers.

For employees, satellites alleviate many challenges working parents face, such as transporting children to school, becoming more involved in school activities, and spending more quality time with their children.

Employers have already documented a substantial decline in absenteeism, tardiness, and the turnover rate among parents whose children are enrolled in these centers.

Satellite Learning Centers are the ultimate business-school partnership fostering teacher empowerment and numerous benefits for taxpayers, businesses, schools, parents, and children.

Dade Academy for the Teaching Arts

The Dade Academy for the Teaching Arts (DATA) is a nine-week program of seminars and clinics designed to provide secondary school teachers with time to conduct research projects, develop creative teaching plans, and trade instructional strategies.

One of the unique distinctions about DATA is that the program is planned and operated exclusively by teachers for teachers. The employee responsible for the DATA project is not an administrator, but a teacher-director. The teacher-director concept, which is also used in the Teacher Education Center, is being continued and expanded. Ten "resident" teachers in six disciplines (mathematics, social studies, learning disabilities, foreign language, English, and science) act as mentors to 70 colleagues (externs) during the year. Each nine-week grading period, 20 colleagues participate in workshops and seminars. While these "externs" are involved in DATA, 20 other DATA visiting professors (adjuncts) are teaching the extern classes at their home schools.

Also unique to DATA is the collaborative operation of the program. Jointly planned and monitored by Dade County Public Schools and the United Teachers of Dade, DATA is one of the first such programs nationally to be developed through collective bargaining.

Future plans call for DATA's expansion to elementary school teachers.

Quality Instruction Incentives Program

Quality Instruction Incentives Program (QUIIP) began four years ago as a voluntary awards program with financial incentives for individual schools that compete for and receive meritorious status. As a "merit school," a school must show a dramatic improvement in its students' intellectual and physical development.

A smaller number of "educational excellence" schools are selected from the "merit school" list, and a final list of "E²" schools demonstrate the most outstanding projects in the district for improving student achievement.

What makes this program so unique is its cooperative development and focus on student achievement. Dade County Public Schools and the United Teachers of Dade successfully negotiated the QUIIP program for inclusion in the teachers' contract. That in itself was a national first!

Individual school staffs vote annually on whether or not they wish to participate. A two-thirds approval vote is necessary. If approved, the QUIIP plan must be developed on a collaborative, collegial basis.

The financial stakes are high. During the 1987-88 school year, more than 69 schools participated. Employees from the winning schools each received a share (up to $1,140) of the $3.2 million set aside by the Florida Legislature for Dade's merit schools program. Since its inception, Dade school system employees have received more than $16.9 million in QUIIP money . . . and every dollar spent on this program is tied to specific, documented educational improvements.

NEW DIRECTIONS

Our new teachers' contract builds on professionalization efforts initiated in prior years, while continuing to move toward school empowerment throughout the district. Steps to streamline middle management, both at the area and district levels, are being piloted in 1988-89.

Central to the districts' restructuring efforts is the decentralization of decision-making to individual feeder patterns, schools, and classrooms and completion of a comprehensive profile for identifying school improvement needs, which is being cooperatively developed, along with a plan for implementing recommended strategies for turning particularly difficult schools around.

Landmark Teachers' Contract

The newly ratified three year teachers' contract enables some teachers to earn up to $64,000 by 1990-91, making them among the highest paid in the nation. Under the agreement, teacher salaries over the next three years will increase an average of 28 percent.

Committed to teacher empowerment, the district is serious about making teaching the profession it deserves to be. Attracting and retaining the best teachers continues to be a number one priority, since excellent teachers are critical components for quality educational programs and outstanding student achievement.

Hailed as progressive, far-reaching, and precedent-setting by the media and educators across the country, the new pact includes an entire article on Professionalization of Teaching. Contract highlights include:

- Teacher involvement in planning/designing new educational facilities, and in the selection and, at certain schools, assessment of principals and assistant principals.
- Continuation and expansion of the School-Based Management/Shared Decision-Making Pilot Program through development of a second SBM/SDM pilot program.
- Development of a pilot Career Achievement (Career Ladder) Program for Teachers, based upon superior performance, professional growth and development, and economic incentives.

- Expansion of the Dade Academy for the Teaching Arts (DATA) concept (designed for stimulating professional growth) to include elementary, as well as secondary-level teachers.
- Creation of a professional leave bank to increase opportunities for teachers to attend educational meetings, conferences, and institutes.
- Pilot grant proposal program to fund Educational Issues Forums through which school faculties are provided with opportunities for meaningful discussion of professional issues.

Shared Decision-Making Extended to Entire Feeder Pattern

In an effort to further reduce bureaucracy and increase broad-based representation in decision-making at the school level, an entire geographic area of schools and administration have been organizationally restructured. The pilot organizational structure includes fewer middle management positions and responsibilities, and the reassignment of area personnel to feeder patterns. It also comprises new governing bodies and leaders for each of the six feeder patterns in the area.

Feeder Pattern Councils

Feeder pattern refers to a geographic school enrollment pattern in which students are generally placed in appropriate level schools based on where they live. Students living in a predetermined attendance boundary attend specified elementary schools which feed into a specified middle/junior high(s) which in turn feed into a senior high school. Dade's feeder patterns are geographically determined by and named for each of its senior highs.

The primary purpose in establishing Feeder Pattern Councils is to enhance networking and strategic planning among schools in the same feeder pattern. Each council develops and uses a shared decision-making model for identifying issues of mutual concern to the schools in its feeder pattern, such as educational goals, programs, and strategies.

Under district guidelines, broad school and community representation is ensured in each council. Participants include a lead principal; other principals; area and central office technical assistance advisors; teachers from each grade level;, as well as PTA/PTSA members; the feeder pattern advisory committee chairperson; an area business/community member; and a student from the feeder pattern high school.

Lead Principals

To effectively coordinate the feeder pattern councils and to assist their colleagues throughout the feeder pattern, the new role of lead principal has been initiated. These high performing principals carry out a number of major responsibilities outside their own school, including:

- Coordinating planning, problem-solving, inservice training, and other technical training assistance for staff.
- Identifying and developing a network of community support.
- Planning and implementing a peer supervision and evaluation system for principals.
- Designing strategies to achieve and maintain faculty and student desegregation.

- Assigning, supervising, and evaluating school psychologists, visiting teachers, and other support personnel.

Additionally, lead principals collaborate and coordinate activities with other lead principals in the district on administrative and educational issues affecting students, staff, and/or communities throughout the county.

Feeder Pattern Technical Assistance and Support Model

Another program designed to further decentralize district and area administration, and at the same time increase resources to schools and feeder patterns, is the Feeder Pattern Technical Assistance and Support Model. Initiated in 1988-89, this pilot is intended to improve the delivery of instruction at each school.

Technical assistance and support teams, comprising district and area office administrators with expertise in elementary and secondary education, vocational programs, student services, alternative education, and curriculum design, have been assigned to the feeder pattern council and/or lead principal for each of the school system's 24 feeder patterns.

Team members serve as primary contacts for each school in their feeder pattern in dealing with issues related to their specialty area. Contrary to previous practice, team members are available for a minimum of one day per week at a school in their feeder pattern. Additionally, they are expected to be "advocates" for their feeder patterns, so as to assure accurate communication of the feeder pattern's needs, concerns, and progress to appropriate administrators at the area and district level.

District Intervention Teams

In very selective cases, where there have been a number of district efforts to address a continuing pattern of deficiency on the part of a particular school, a thoughtful approach to district intervention is being implemented.

During 1988-89, after developing criteria for identifying schools needing improvement, schools and appropriate personnel will be identified to participate in a pilot District Intervention Teams program. Teams of experts will be sent to these schools.

Comprising principals and teachers of other schools, curriculum experts, auditors, food-service officials, business managers, parents, community members, and other needed experts for a particular school, the team will develop a comprehensive school improvement plan for the school. This plan will be implemented over a specific period of time by the school's administrative staff, faculty, and support services personnel, with improvement regularly reviewed in light of the same factors that contributed to the school's deficiency.

In selected cases, high-performing, high-achieving principals, assistant principals, and teachers with records of exemplary performance will be given the opportunity to make multi-year commitments to improving the effectiveness of such schools in specified areas of weakness and, in return, will receive additional remuneration for meritorious, documented achievements in this regard.

NEW ROLES FOR TEACHERS

One of the central issues in professionalization is attracting the best and brightest candidates into teaching. Once there, the continued professional emphasis in Dade County encourages outstanding teachers to stay in the classroom while enhancing their own career goals as well as those of their peers.

Principal and Assistant Principal Selection

Programmatical and philosophical continuity are key components in the operation of any school. The promotion or retirement of a principal or assistant principal can dramatically affect a faculty's performance.

As part of the collective bargaining agreement, teachers are now permanent members of school-site administrator selection teams. When a vacancy occurs for a Dade County principal or assistant principal, two teachers are elected from the affected faculty to sit with appropriately determined county and area level administrators to interview and hire the new administrator.

Facilities Planning

Teachers also now play a critical role in planning the future instructional utilization of schools in Dade County by participating on structural design committees for new and existing schools.

Drawing from a pool of teachers cutting across all academic disciplines and grade levels, teacher appointees are involved in the review of various design stages of school construction. The most important innovation in this area is inclusion of teacher input in the preliminary design stage.

The effect of this provision takes on added significance in Dade County because of the 1988 passage of a record-setting $980 million school bond referendum. That money is being used to construct 49 new schools and to renovate the 259 schools already on line.

Less than a year old in practice, teacher input has already dramatically changed several school efficiency and safety features and thereby resulted in important modifications of school facilities, work areas, placement of science and home economics laboratories, and other pertinent considerations.

Lead Teachers, Teacher-Directors/Coordinators

In a traditional school system the only way "up" for a teacher is to leave the classroom for an administrative position. That view of teachers at the bottom rung of the educational hierarchy is being changed in Dade County.

Lead Teachers, Teacher-Directors, and Teacher-Coordinators are a growing part of the Dade County landscape. In the county's Satellite Learning Centers, schools at the workplace, Lead Teachers now supervise the program's operation in cooperation with their host school's principal.

Lead Teachers teach classes; but they also perform appropriate administrative/supervisory duties on a day-to-day basis, while remaining part of the teachers' bargaining unit.

A new position of Teacher-Coordinator has been established for programs of districtwide scope. The first Teacher-Coordinator is supervising the Future Educators of America chapter program. All secondary schools in the district, and nearly all elementary schools, have established Future Educators of America chapters.

Also remaining part of the teachers' bargaining unit are Teacher-Directors. They assume even more responsibility than do Lead Teachers by working under a county level administrator, and being exclusively responsible for the programs they direct, including the Teacher Education Center and the Dade Academy for the Teaching Arts.

Career Ladder

A critical dimension of the Professionalization of Teaching movement is establishment of a career ladder, whereby teachers can expand their role, their function, their responsibilities, and their compensation, without leaving the classroom.

In Dade County we have already begun to put pieces of a career development program together.

During this school year, in accordance with the most recent contract agreement between Dade County Public Schools and the United Teachers of Dade, we are working to finalize a comprehensive career development program, folding in and expanding many of the creative programs already underway. The career ladder will become operational during the 1989-90 school year.

PROFESSIONAL DEVELOPMENT

Many programs in Dade County's professionalization movement are designed to help teachers reach higher levels of excellence and ultimately to help students gain a superior education. Several professional development initiatives focus on these goals.

Teacher Education Center

The district's Teacher Education Center (TEC) is governed by a council comprised of teachers and administrators and is administered by a Teacher-Director. It provides the most recent research-based techniques in teaching, helping teachers to grow professionally and renew their certificates.

A very special project falling under the auspices of the TEC is the Educational Research and Dissemination program, which trains teachers on how to utilize research data in their instructional program. A unique aspect to this project is the involvement of the American Federation of Teachers (AFT). AFT provides such teacher training in collaboration with the union's local affiliate and the school district.

Critical Thinking

Recognizing that development of critical thinking skills often takes a back seat to other more specific academic pursuits, Dade County Public Schools, the United Teachers of Dade, and the American Federation of Teachers have teamed up to teach teachers how to integrate critical thinking skills in their ongoing curriculum and instructional strategies.

The emphasis has been on seeing that all students ultimately receive this training, not just gifted youngsters who have traditionally benefited from such programs.

Dade's 1987 Dade County Teacher of the Year has received specific training in how to teach critical thinking skills, and she is teaching teachers the methods necessary to impart these skills. In addition to integrating these methods in their own curriculum, teachers who complete the program are encouraged to teach these new-found methods to others at their work sites.

Although only in its second year, several hundred teachers have benefited from direct and indirect instruction provided through this program.

Teacher Peer Intervention and Assistance

The involvement of individuals in setting standards for their own performance is another touchstone of professionalism. In Dade County, the school system and the teachers' union cooperatively developed a diagnostic, prescriptive assessment process, which has been in place since 1982-83. Called the Teacher Assessment and Development System (TADS), it has paved the way for greater involvement in peer evaluation procedures, viewed to be essential in a professionalized environment.

From both management and union perspectives, the roles peers can and should play in intervention and assistance must be expanded. The goal of peer intervention is to assist teachers in delivering instruction more efficiently and to provide quality assistance and clinical supervision to teachers who are experiencing difficulty.

Professional Growth Provision

The school system's negotiated Professional Growth Provision encourages voluntary racial integration of all school faculties while promoting professional development. This program is designed to attract teachers who are currently assigned to a school where their race is in the majority to transfer voluntarily to a school that is out of compliance with required faculty racial ratios.

Teachers who participate in the program are accepted into an advanced degree program at a local university. Tuition-free to the student, masters and doctorate programs are part of the incentive aspects of the project.

Participating teachers also receive priority consideration for the DATA Program and may incorporate participation in the program as professional steps on the career ladder, once the ladder takes effect.

Leadership Experience Opportunities

Although opportunities for expanding professional horizons are increasing for classroom teachers, hiring qualified administrators remains an essential ingredient to the success of our professionalization movement. Encouraging teachers to become administrators is yet another component in Dade's educational reformation process.

The Leadership Experience Opportunities program for Teachers (LEO-T) provides qualified teachers a semester of administrative training experiences at each of two schools in the district.

Administrators' Professionalization

As the district pursues restructuring of education and teacher empowerment through the Professionalization of Teaching Task Force, a corollary group, the Administrators' Professional Development Committee (APDC), examines issues and makes recommendations regarding the professional development and evolving roles of school-site, area, and central-office administrators.

APDC initiatives already implemented and underway include professional development programs and incentives, career ladder models, and more equitable managerial classification and compensation. Professional growth is provided through a number of leadership opportunities and internships.

- **Leadership Experience Opportunities (LEO) programs** provide professional development experiences for high-performing principals, assistant principals, and area and district administrators. In the LEO-AP program, assistant principals become acting principals during the summer school session, while regular school principals have the opportunity to participate as LEO-Ps at the area or district level. Being piloted in 1988-89 is the LEO-SAC program which will provide similar experiences for other school, area, and central office administrators.
- **Associate Executive Training Programs** are designed to prepare qualified principal and assistant principal candidates utilizing state-of-the-art training technology and individualized training experiences that reflect "effective schools" literature on high performing principals, prior to their formal appointment.
- The district's **Management Academy** offers an extensive array of administrative professional development seminars and workshops from assertive discipline to school-site budgeting to principal competencies and time management.
- **Administrator Design Teams** provide assistance in formulation and development of policies, programs, and materials that impact administrators.
- **A Regular Rotation of Administrators** policy communicates the expectation that all administrators will move to another work site, after five years in the same job or location, in order to foster their professional growth and better utilize administrative talents.
- **Administrator Exchange Program** options are being identified that will encourage Dade administrators to exchange positions, for a semester or up to a year, with administrators in similar positions in other school districts across America and abroad.

Finally, classifying and compensating all Dade principals at the same executive level (a national "first") supports the research on "effective schools," which shows that the single most important ingredient for an effective school is the able and visionary leadership of an effective principal.

PROFESSIONALIZING THE WORK ENVIRONMENT

Corporate America has recognized for many years that workplace surroundings affect the productivity and creativity of employees. In Dade County, that simple fact has changed attitudes about school designs and other faculty-based enhancements.

Professional Leave Bank

Dade school officials and the teachers' union have agreed to establish a Professional Leave Bank for the county's teachers. Its purpose will be to encourage and facilitate participation of teachers in educational meetings, conferences, institutes, and other similar professional activities.

The Bank will do this by providing teachers with leave days specifically earmarked for professional activities.

Educational Issues Forum

In the continued spirit of initiating bottom-up approaches for identifying and addressing professional and educational issues, the school system and the union have also agreed to establish, for the first time, an Educational Issues Forum provision which will grant teachers an opportunity for meaningful discussion of professional issues at the work site.

"Meaningful discussion" may include access to renowned speakers, released time for faculty members to plan/present/conduct colloquia and seminars, and other such endeavors.

Opportunities for participation is open to all schools in the

county. It is being piloted during the 1988-89 school year, with grant requests reviewed and approved by a joint union-management Educational Issues Forum Committee.

Participation in this activity is being encouraged through Faculty Council decision-making.

Faculty Workroom Upgrade

Productivity in the workplace is contingent on many variables. One of the most important of these is the gathering place where professionals meet to exchange ideas or to simply spend a few quiet moments collecting their thoughts and making appropriate plans.

The ideal spot for these moments of reflection and collegial interaction is the faculty lounge. A major drawback has been the inconsistent environment of faculty lounges among all school work sites. Accordingly, through the new contract agreement, the school system and the union are now working together to improve the design and decor of all faculty workrooms.

Paperwork

The issue of reducing paperwork is no longer just a hopeful dream in Dade County. Through collaborative interaction, committee recommendations on specific ways to reduce paperwork are being implemented.

At the work site, school administrators and union building stewards are working with their Faculty Councils to assess paperwork demands. When possible, forms and data collection instruments deemed unnecessary are being eliminated.

At the county level, union representatives and administrators are reviewing all district level documents. Those that cannot be justified are being eliminated. A program to more fully utilize the computer data base for retrieving information has been implemented.

Computers are also being used more effectively to grade papers and produce reports for teachers, thereby eliminating a significant amount of paperwork.

The process is by no means complete, but the task is underway and a significant dent in paperwork reduction can already be felt.

Dade Education Compact

Launched last year, the Dade Education Compact, a collaborative agreement of Dade County Public Schools, the United Teachers of Dade, and the University of Miami, is designed to provide our students with a better education while also enhancing professional development opportunities for teachers. Compact members meet regularly to discuss and resolve problems and issues related to the school system.

A number of initiatives have been successfully initiated in this forum and implemented throughout the district. They address teacher recruitment, alternative certification, graduate programs for teachers, dropout prevention, and educational research.

Plans also call for a number of personnel exchange programs between the school system and the university. This enables university professors to gain "hands-on" experience teaching in today's classrooms, while district teachers become adjunct professors at the university.

We are in the process of establishing contracts with other local universities and colleges.

ATTRACTING AND RETAINING THE BEST

Unlike many school districts throughout the nation, especially those in large urban areas, Dade County Public Schools is dealing effectively with the teacher shortage issue.

A vigorous teacher recruitment and orientation program, including innovative teacher training/recruitment initiatives, and the recently ratified landmark teachers' contract are central to Dade's success in attracting the best and brightest teachers for our schools.

Teacher Recruitment and Orientation

Since initial implementation of its professionalization efforts, the number of qualified applicants for every teacher opening has quadrupled from two to eight. Through an aggressive teacher recruitment program and an excellent teachers' contract (primarily focused on improving teachers' salaries and the status and working conditions of teachers), the district is able to hire well-qualified applicants. This program includes extensive advertising and recruitment in the nation's colleges and universities and an annual, national teacher recruitment fair.

This hiring pattern continues, even though it is projected that the district's student population will increase by 20 percent over the next five years. This tremendous growth, along with the natural attrition of teachers who resign or retire, requires Dade to hire some 2,500 new teachers annually.

All newly-hired teachers participate in an intensive five-day orientation workshop cooperatively designed and implemented by Dade County Public Schools and the United Teachers of Dade prior to the opening of school to acclimate them to South Florida and to the school district. Workshop sessions are conducted on classroom management, assertive discipline, and teaching in a multi-cultural community.

CORAL GABLES
FUTURE EDUCATORS OF A

Future Educators of America

Other "home grown" ideas for averting a local teacher shortage are the Future Educators of America (FEA) project and establishment of a teaching magnet program.

To create an interest among high-achieving students in teaching as a profession at an early age, FEA chapters have been organized in each senior high school. Chapter sponsors were hand-picked by their principals and workshops were held throughout the district. A newly-created position, Teacher-Coordinator, has been established to supervise this program. A teacher-coordinator continues to be a member of the teachers' bargaining unit.

As the future educators program begins its third year, every senior and middle/junior high school has an active and growing FEA chapter. For two successive years, top students (one from each senior high chapter) have received $500 college scholarships through the Stephen Paul Rost Scholarship Fund. Future plans for the scholarship program include a "signing bonus" for those students who receive an initial FEA scholarship and return to Dade County to teach.

FEA chapters are also expanding to elementary schools. Additionally, plans are underway to establish a magnet program next year that will draw students interested in teaching from throughout Dade County to one of our senior high schools, which will specialize in this critical area.

Teacher Recruitment and Internship Program

Dade County Public Schools and the United Teachers of Dade have teamed up with the University of Miami, through the Dade Education Compact, to attract, train, and hire bright, liberal arts (or equivalent) college graduates for the teaching profession. By the end of a 12-18 month apprenticeship program, called the Teacher Recruitment and Internship Program (TRIP), successful participants have completed all state requirements for teacher certification, have earned a Master's Degree, and have received a solid orientation to the classroom and the district.

Working with a mentor teacher, a TRIP participant's typical day comprises teaching four classes, planning one period, and TRIP mentoring activities two periods. The University of Miami has structured a special program for TRIP teachers that includes formative and summative evaluations.

Dade County Public Schools and the United Teachers of Dade are exploring additional TRIP-type programs with other local institutions of higher education.

PARTNERSHIPS

Without the full cooperation and support of Dade County's business community and parents, the innovations underway in the country's fourth largest school system would be impossible.

Student enrollment in Dade's public schools increases by the thousands annually. The confidence expressed by voter support and increased parental and foundation involvement are incentives for the school system and teachers' union to continue their goal of increased professionalism.

Community Report Card

In yet another unprecedented move, Dade County Public Schools and the United Teachers of Dade are encouraging parents to assess the quality of their neighborhood schools.

This pilot year, an extensive questionnaire will be sent to a scientific sampling of parents in 27 Dade public schools. From the answers received, a comprehensive report will be prepared and disseminated throughout the community. The questions deal with all aspects of the school and its personnel.

The questionnaires are designed not to single out any specific employee, but to provide a profile of how parents view their child's school.

Foundations

A number of cooperative efforts with international, national, state, and local foundations interested in educational reform are currently underway in Dade County Public Schools. Foundation participation ranges from underwriting planning and start-up costs for new professionalization initiatives to sponsoring leadership training seminars and networking opportunities for teachers, principals, and administrators to providing technical assistance, support, and consultants for individual school projects.

Current foundation efforts include:

- **Ford:** Planning grant for a preservice clinical training model.
- **Matsushita:** Consultants to a senior high school in the Partners In Education project.
- **Danforth:** Inservice training program for urban educators, including teachers and principals from the same feeder pattern, teacher-directors, administrators, and school board members.
- **BellSouth:** Planning grant for an elementary Dade Academy for the Teaching Arts.
- **Southern Bell:** Corporate sponsorship of Dade Academy for the Teaching Arts.
- **Rockefeller:** Inservice training program for teachers of humanities in intergroup, intercultural, and race relations.
- **Mitchell Wolfson, Sr.:** Collaborates with Dade County Public Schools, United Teachers of Dade, Miami-Dade Community College and Urban League of Greater Miami in Partners In Education pilot project to fund college educations for 50 Miami Northwestern sophomores (as of 1987) and the 1987 sixth-grade class at Drew Elementary.
- **Dade Public Education Fund:** Provides mini-grants to teachers and principals to improve individual classroom and schoolwide educational programs.

Bond Referendum

The entire Dade County community entered into a seven-year partnership with the public school system in March, 1988 when the electorate supported a record $980 million school-bond referendum for school construction and renovation.

Dade County, the fourth largest school system in the United States, is one of the nation's fastest growing systems. Schools throughout the county consistently exceed 100 percent capacity, with many currently at 130 percent capacity. The bond referendum was essential for the progress begun under professionalization to continue.

The public understood and passed the referendum. Construction on new schools and renovations on existing schools will carry on into the 21st Century.

ORGANIZATIONAL/ PLANNING STRUCTURE

Traditionally, Dade County Public Schools and the United Teachers of Dade have established joint task forces and committees, with equal representation, to deal directly with problems and seek mutually agreed upon strategies for resolution. This shared decision-making approach has contributed significantly to fostering the positive atmosphere which led to the creation of, and continues to fuel, Dade's comprehensive professionalization movement.

In addition to the district's professionalization efforts already underway, there is an ever-increasing number of new ideas and concepts to explore in support of educational reform. Therefore, the model of joint deliberation and joint development of recommendations to Superintendent Dr. Joseph A. Fernandez and UTD Executive Vice President Pat Tornillo continues for 1988-89 with establishment of the following joint DCPS/UTD task forces:

- ***Reconstituted Professionalization of Teaching Task Force (POTTF):** jointly reviews the progress of current professionalization decisions and planning strategies for future implementation;*
- ***Newly-established Planning/Oversight Subcommittee:** will make recommendations for new and/or modified professionalization programs to the POTTF; and,*
- ***Broad-based Professionalization Issues Review Councils:** assure districtwide participation from all work locations and continuity of activities generated by former joint task forces.*

Joint Task Forces

Since 1973, Dade County Public Schools and the United Teachers of Dade have worked cooperatively on a number of joint task forces and committees of equal representation. This long-standing tradition of establishing individual task forces has provided forums for open discussion of many educational issues. These task forces have been responsible for making appropriate recommendations to the Superintendent of Schools and the United Teachers of Dade's Executive Vice President.

This climate of collaboration led to the original Professionalization of Teaching Task Force in 1985 and ultimately led to implementation last year of Dade County Public Schools' and United Teachers of Dade's far-reaching educational reform movement.

DCPS/UTD Professionalization of Teaching Task Force

Co-chaired by the Superintendent of Schools and the UTD Executive Vice President, the DCPS/UTD Professionalization of Teaching Task Force (POTTF) has been reconstituted to jointly review the progress of current professionalization decisions and plan strategies for implementing future phases of these initiatives. Additionally, the POTTF will make recommendations for new and or modified programs to be incorporated in School Board Rules, the DCPS/UTD Labor Contract, and the School Board's annual legislative program, based on recommendations from the Planning/Oversight Subcommittee.

POTTF Planning/Oversight Subcommittee

Recommendations previously approved by the POTTF are monitored by the Planning/Oversight Subcommittee, which issues periodic progress reports. Another major responsibility of this group is exploration of new avenues to further expand the professionalization of teaching/education movement. Ideas considered worthy of implementation are developed and submitted to the POTTF. Crucial to the oversight and planning responsibilities is the review of recommendations from the Professionalization Issues Review Council (PIRC) I.

Instrumental in the implementation of SBM/SDM school improvement projects and governing structures has been the successful granting of more than 100 waivers from DCPS/UTD Labor Contract provisions, School Board Rules, and State Department of Education Rules. The Subcommittee continues this practice by receiving and reviewing all requests for waivers.

Professionalization Issues Review Councils

In an effort to continue the bottom-up approach to initiating positive change and resolving major issues and concerns, a joint districtwide Professionalization Issues Review Council (PIRC) I is being established. Comprising broad representation of paraprofessionals, teachers, and administrators at all levels, as well as school-based, area, and central office representatives, PIRC I maintains regular communication with all work locations to adequately review the impact of proposed management and policy decisions. It also reviews recommendations from Professionalization Issues Review Council II (see below) and develops and submits its own recommendations to the Professionalization of Teaching Task Force Planning/Oversight Subcommittee.

To assure continuity of ongoing district activities, the Professionalization Issues Review Council (PIRC) II is also being established. Representatives of all former task forces (paraprofessionals, teachers, and administrators) consider professional and educational issues and make appropriate recommendation to Professionalization Issues Review Council I.

Bureau of Professionalization Programs and Operations

In the past year, Dade County's educational restructuring and school empowerment efforts have grown substantially. During this time, district responsibilities for the rapidly expanding list of reform initiatives, including School-Based Management/Shared Decision-Making, the Dade Academy for the Teaching Arts, Satellite Learning Centers, and numerous professional growth programs were disbursed throughout the school system. To effectively manage the district's diverse and far-reaching professionalization efforts, the Superintendent of Schools recommended (and the School Board approved) establishment of a Bureau of Professionalization Programs and Operations (BPPO).

Now, administrative responsibility for the school district's various professionalization initiatives are consolidated in the newly-established Bureau. Specifically, BPPO is responsible for planning, coordinating, overseeing, and disseminating information regarding professionalization functions and programs, including policy development in this regard. Consistent with its primary functions is the operation and oversight of the flagship of the professionalization movement, School-Based Management/Shared Decision-Making, and the innovative mini-sabbatical program, the Dade Academy for the Teaching Arts.

Also, the Bureau provides technical assistance and support for all other professionalization initiatives throughout the school system.

Almost one-third of the 98 Action Plan recommendations included in the Dade County School Board's 1988-93 District Strategic Plan relate directly to professionalization and are being coordinated by the Bureau.

Department of Professionalization

Organizational restructuring has also occurred on the union's side of the ledger. A new Department of Professionalization has emerged within UTD. Previously entitled Professional Standards and Relations, the newly-created department provides technical assistance and support for the various professionalization initiatives. Collaborating together, the DCPS bureau and UTD department, have direct responsibility for the continuity and growth of Dade County's professionalization movement.

IN CLOSING

Dade County Public Schools is on the cutting edge of educational reform. Fundamental changes are being made in our schools to meet the needs of a competitive world, while preparing for the rapidly approaching 21st Century.

The Professionalization of Teaching/Education movement's far-reaching initiatives are restructuring nearly every dimension of the school system with common goals of professionalizing education and significantly improving student achievement.

Successful implementation of these sweeping efforts has resulted from visionary leadership and a clear and escalating pattern of collaborative planning and support by a progressive school board, superintendent, and teachers' union.

The Superintendent and his staff are successfully pioneering and incorporating professionalization iniatives into the school system's mainstream. He has set the pace in generating and creating programs and ideas that encourage and facilitate unprecedented cooperation among teachers and administrators.

The Dade School Board has been willing to modify its rules through waiver requests to provide school-based management/shared decision-making schools with maximum flexibility in development of their unique programs. The Board has also made Professionalization of Education a major goal in the school system's District Strategic Plan for 1988-93.

The teachers' union has also been willing to take significant risks by modifying the collective bargaining agreement on a case-by-case basis so that each school staff knows that their innovative ideas can be actively pursued.

For more information contact:

Dr. Joseph A. Fernandez
Superintendent of Schools
Dade County Public Schools
1450 N.E. Second Avenue
Room 403
Miami, FL 33132
(305) 376-1429

Mr. Pat L. Tornillo, Jr.
Executive Vice President
United Teachers of Dade
2929 S.W. Third Avenue
Miami, FL 33129
(305) 854-0220

Dr. Frank R. Petruzielo
Associate Superintendent
Bureau of Professionalization
Programs and Operations
Dade County Public Schools
1450 N.E. Second Avenue
Room 402
Miami, FL 33132
(305) 376-1470

Ms. Marie P. Mastropaolo
Director
Department of
Professionalization
United Teachers of Dade
2929 N.W. Third Avenue
Miami, FL 33129
(305) 854-0220

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Lynn [illegible], Supervisor
DCPS, Professionalization Information & Publications

Annette Katz, Coordinator
UTD, Media Relations

Daniel F. Wilson, Photographs

Senator **Cochran**. That would be very helpful, I think, Mr. Chairman, and I thank you.

One of the key ingredients of the President's proposal which he made last year was an alternative certification process to be recognized as a way to attract teachers into the profession, take advantage of people who are willing to teach maybe on a part-time basis or who have an interest in volunteering their efforts to help make up the difference in some of the shortage areas.

I'm curious as to your reaction, Mr. Rockefeller, to that alternative certification suggestion. Is that something that we do need to consider? And how do we implement that since certification really is a matter that's under the jurisdiction of States not the Federal Government?

Mr. **Rockefeller**. Yes, I'd be pleased to respond briefly on that matter. We have seen in New Jersey and other States examples of what are alleged to be very successful alternative certification programs in terms of attracting high quality talent. Al Shanker earlier alluded to some of the risks of alternative certification, and I agree that they are there.

I believe that unless, however, we are flexible in our approach to the future teaching pool that we are not going to solve especially some of our short-term problems, whether they are social or labor force problems. So I think we need to create flexibility and good measurements in the same breath.

While I'm not an expert on how the Federal Government can be involved in this, I would think that the legislation ought to be very carefully crafted so as not to make impossible creative routes that could be worked out on a State-by-State basis. We are beginning to receive information that some alternative certification programs have been very successful. The unions are beginning to smile upon them from time to time and accept them into their own format. And I do think this is a way of the future. The idea that there's only one way for individuals to enter the teaching profession I think is narrow-minded and self-defeating.

Senator **Cochran**. It occurs to me that one thing we might consider adding to this bill—I don't want to clutter it up, of course, Mr. Chairman. I know it's your bill.

The **Chairman**. We welcome cosponsors.

Senator **Cochran**. I am a cosponsor. I'm happy to announce publicly that I am a cosponsor of this bill. I was added to the bill in December. I didn't make the early cut, so my name's not on the printed copy that we have before us.

The **Chairman**. It will be from now on.

Senator **Cochran**. But I do appreciate the fact that the bill does address a number of concerns, and Teacher Corps is an example. Minority recruitment, of course, is a very important part of this bill, I think.

The fact, though, that we do have some concerns about things like alternative certification, we might be able to fold in something like a grant program to States to encourage them to develop an alternative certification procedure or change in their law. That's something that occurs to me that we might consider as we proceed to the markup of this bill.

That brings me to the last point I want to make; that is, I think personally the strongest part of the bill, Mr. Chairman, is Title III, the minority recruitment portion of the bill. Dr. Hatton so capably testified about that problem and what we need to be doing and thinking about as we address that issue. It's interesting, I think, to hear her say that whatever we do tomorrow may be a generation from now paying dividends in terms of changes that we make in the law here now, that there are other options that we need to explore in that area.

Are there any suggested changes or additions to the title relating to minority teacher recruitment that you would suggest we consider, Dr. Hatton? Is there any way to strengthen that section even more so that we address the need for a critical mass, as you put it, in our teacher population right now?

Dr. Hatton. I'm very happy that you asked that question, Senator. I've wanted to answer it, so I'm happy that you asked that question.

The only two things I would do—and they're very minor—is to make the components a more coherent package by tying Section (d) of Title III, the study, to the other programmatic divisions to make sure that there is learning from what's going on in the programs which would be supported by the first (a), (b), and (c) sections of Title III, and that that's disseminated widely to States and local districts who might learn from what is going on in those programs.

It's not quite clear to me that that would be what would be happening in the study which would be funded through the legislation in DOE. I assume that's where that would be housed.

The other thing, which is a little more important and critical, I think, that I would do is to ensure that there is a flow of people who are trained. You've got your Magnet School, your TRIO, your Summer Institute programs. Those people need to be moved right directly into Teacher Corps programs, and there needs to be some provision in the Teacher Corps' title which would either have a special incentive for Teacher Corps programs to bring those people into their effort, or to provide some overlap between those two so you don't have a stand-alone minority effort sitting over here unrelated to your Title I—which is also going to have its minority participation. It's not nonminority. But there needs to be, I think, a tighter and more visible linkage between those two components of the bill.

Senator Cochran. Thank you very much. I think that's very helpful. Thank you.

The Chairman. Senator, we have alternative certification in the President's program which we reported out, which is on the calendar at the present time. But there's no reason that we can't have——

Senator Cochran. That might not go anywhere given the House's reaction to the President's bill. They haven't even scheduled it for consideration.

The Chairman. But I think it's a useful suggestion to fold it in here as well.

Senator Rockefeller.

Senator Rockefeller. Mr. Chairman, just a brief question to my cousin David.

The studies continue to show that when people are getting out of high school and heading into college and getting out of college and heading into life that what they want is money and as much money as they can get quickly. As a result, you obviously have a lot of people wanting to be securities and mergers and acquisition specialists and lawyers.

It's interesting to me that in my own life that the folks that I grew up with who are lawyers are not particularly happy in their career as being lawyers, if they are career lawyers. And most of them are looking for ways to get out of it although, of course, it pays very well. It's a matter of self-esteem. You know, you do your work in the stack room, and then you get to be a junior partner, whatever it is, and then sort of what are you doing? You're taking care of somebody else's wills and estates or, you know, mergers and acquisitions. And that's interesting to some, but I think not so interesting to a lot, although it pays well.

Now, Japan handles self-esteem in teaching by simply saying that when you get out of college, if you want to go into business or you want to go into teaching, you go into what you want to do the most because the salary for each will be the same. So the salary is extremely important. So is self-esteem, and they've both got to work.

Now, we know salaries aren't working well enough in teaching, and yet, on the other hand, when people get into something like teaching—two-thirds of Peace Corps volunteers, for example, who've returned from the Peace Corps, tens of thousands of them now have gone into public service of some form, which means that their self-esteem has been raised to cause them to do something which pays less but for which they get another kind of return.

In your program, when you talk about raising the level of esteem for teachers—now, that could mean the Nation's esteem for teachers—so that the word gets out, or are you also looking at the problem of teachers in their present position with all the difficulties and all the pressures on them, both minority and nonminority, questions about their self-esteem, how to encourage their self-esteem to keep them in the profession?

Mr. ROCKEFELLER. Well, I'm certainly referring to both, Jay. I think Al Shanker touched, however briefly—I believe before you arrived—on the systemic issues in schools. I might just make one or two points about that.

I believe that teachers will in our culture need to be paid more if we are going to recruit the quality of teachers that most of us, I believe, have in mind. On the other hand, as you point out, there are people who are willing to make tradeoffs, some of them at the beginning of their career, for more satisfaction, less pay. And there are others who have the satisfaction of pay early in their lives who begin to look around when they're 40 or 50, some of them earlier, and wonder if that's all there is to life, and who would, I believe, be willing to enter other less lucrative professions, including teaching, if the pathways to those professions were less forbidding. And I believe that less forbidding elements must be addresed by those who run the schools; that is, the district personnel and the school building personnel, those who are really responsible for the climate of working conditions.

We've heard several times this morning testimony about that climate. I truly believe that pay will mean nothing unless the climate and the conditions of schools are improved so that those individuals, whatever they are paid, when they go to work can be safe, can be proud, and can be effective in the classrooms. Just as we've seen in corporate America in the last few decades an enormous recognition of the fact of the importance of the climate of the workplace to the effectiveness of corporate bottom line, I believe we must attend in schools equally to the climate and structure of the way in which education goes on, though I believe we must also increase salaries. Without those structural changes, I don't think that we'll be effective, and I think self-esteem will continue to be at a distressingly low level.

Senator **Rockefeller**. Thank you, Mr. Chairman.

The **Chairman**. Thank you very much. Thank you all very much for coming. We appreciate it.

Our third panel, John Goodlad, Director of the Center for Education Renewal at the University of Washington, Seattle, representing the American Association of Colleges of Teacher Education; Judy Johnston, Director of the Schenley Teacher Center in Pittsburgh, representing the Council of Great City Schools.

Dr. Goodlad, we'll commence with you.

STATEMENTS OF JOHN I. GOODLAD, DIRECTOR, CENTER FOR EDUCATIONAL RENEWAL, UNIVERSITY OF WASHINGTON, SEATTLE, WA, AND PRESIDENT, AMERICAN ASSOCIATION OF COLLEGES OF TEACHER EDUCATION; AND JUDY JOHNSTON, DIRECTOR, SCHENLEY HIGH SCHOOL TEACHER CENTER, PITTSBURGH, PA, ON BEHALF OF THE COUNCIL OF THE GREAT CITY SCHOOLS, WASHINGTON, DC

Dr. **Goodlad**. Mr. Chairman, I'm pleased to be here this morning. I want to congratulate you and Senator Pell and the committee for the focus of the work you have done, for the way in which you've balanced consideration for research, evaluation, and development, and particularly for the substantial support which you're offering in these initiatives.

In looking down the other lists of participants, I realize that I seem to be representing all of the country west of the Charles, the Potomac, and the Hudson, and I'll refrain from taking equal time from all those on the East. Having come the farthest, I'll be brief.

I wish to address three component parts of the initiatives: first, the part that has been talked about most, the effort to recruit more minority teachers; second, the effort to improve preparation programs; and, third, the reference almost throughout to partnerships of various kinds, and I'll refer specifically to the partnership between universities and schools.

Let me try to say some things about the minority recruitment that have not been said. A great many very valuable things have been said already. Two points: First of all, let me say that I'm speaking on all three of these issues out of a 5-year comprehensive study of the education of educators in the United States, just coming to a close, and so I speak out of a great body of data from looking at institutions and preparation programs all over the country. Something that's not surprising to you is that we find in our sample of future teachers now in the tubes, only 8 percent representing the minorities, about half of that 8 percent black, about half from the other minorities.

I think we need to realize that minorities are not going to be attracted into teacher education programs where they repeat the experience of being minorities. In large measure, this is now the case. So somehow or other, the guidelines for this part of the initiative must be directed to getting a critical mass into each teacher education program.

The second point I wish to make that has not been made is there is now a considerable number of minority students in the tubes in historically black institutions and in de facto segregated black institutions in the city. The ones in the rural historically black institutions who are preparing to teach, we find in our interviews, will not go to the city if that institution is not available to them. The ones who are in the cities will not go to the rural areas if they do not have access.

We need to remember, therefore, that we may have a desperate shortage of minority black teachers in the rural areas if we do not provide recruitment support for those who are already in the tubes and who will be attracted, who will come without a great deal of effort in recruitment, but who will find themselves in a very desperate situation, which is that because of inequities in their educational backgrounds, because of their lack of access to knowledge, they've come to college ill prepared. They've confronted tests which tell them that they do not have the basic literacy skills needed. They're confronted with not four, not five, but 6 years of college to make up those limitations and to prepare to teach. If we don't provide the support for them, our minority teacher supply will drop drastically.

Exactly the same situation is to be found in somewhat similar institutions in the urban environment. I don't think either of those two points has been made. One, the program into which minorities are recruited must represent a substantial number of minorities so they don't repeat the minority experience. Two, there already are students in the tubes who need financial help more than the ceilings that are being proposed in order to continue to become teachers. Losing those people will create an even more severe situation than we now have.

Second, let me address preparation programs. We have documented in great detail what is going on in teacher preparation programs in the United States in a representative sample of institutions. Let me say that not only are the pieces of teacher education—they're not just loosely coupled, they're just not on the track.

The initiative regarding the development of model programs is very much needed. Unfortunately, we've been blinded for nearly a hundred years by reform reports with simplistic solutions. For example, anyone graduating from college with a three-week workshop and mentoring should be able to be certified under an alternative program. Let me say in direct answer to some concerns of Senator Pell's that we cannot be assured that these people who are going into teaching understand the nature of our political democracy. We cannot be assured that they have had the necessary education. If they don't understand, they can't teach it to our children.

We need a pre-ed program of general studies which assures that teachers have the content. We cannot be comfortable simply with graduation from a college. We have over 3,000 higher education institutions in the United States. They vary widely in quality. Someone coming at the postgraduate level with a transcript that's 20 or 30 years old is not necessarily qualified in the content area, let alone the pedagogical area.

So let me urge you to put the toughest possible guidelines on that part of the initiative and to make sure that the sums are released in substantial sizes so that truly model programs are created. We do not now have a single model teacher education program in the United States. Flexer at least had that in 1910 when he proposed drastic upgrading of the medical education profession.

My final set of comments pertains to partnership. It is interesting to note in a hundred years of education reform reports that the reform of schools and the reform of teacher education never have been tied together. James B. Conant, former president of Harvard and Ambassador to West Germany, wrote a comprehensive report on teacher education in 1963. In 1965, we had ESEA and a great attention to the reform of schooling. Mr. Conant's report was buried in that school reform effort and was never connected to the reform of the schools. It's time to join the two, and the prospects for joining the two are contained in these initiatives.

Therefore, I strongly recommend that you give no money to any proposal for restructuring teacher education to the schools alone or to teacher-preparing institutions alone. We must reconceptualize that process. The teacher education program must include exemplary schools. We have programs magnificently designed to reproduce the status quo. We are mentoring teachers with teachers who are teaching as we taught 30, 40, 50 years ago. The only way we're going to turn that around is to join schools which become renewing schools in conjunction with the university where the future teachers are placed, with the universities and the school districts having joint responsibility. That is going to take money. It's going to take concentrated money. So, again, I urge don't spread the money thin. Focus it on programs that meet the toughest possible standards at the point of beginning.

Thank you.

[The prepared statement of Dr. Goodlad follows:]

Prepared Statement of John I. Goodlad

Mr. Chairman, Members of the Senate Committee on Labor and Human Resources, I am pleased to appear before you this morning with regard to **The Excellence in Teaching Act** (S. 1675) and **The National Teacher Act of 1989** (S. 1676). I do so on behalf of the American Association of Colleges for Teacher Education and its 720 members schools, colleges and departments of education.

Let me begin by commending you for your initative in developing these two proposals. They are significant in their focus, design and level of support and I hope that they can be combined in such a way as to not lose their potential impact upon schools and teacher education programs. Both are comprehensive in their scope and promise a new level of partnership between the Federal Government, States, Colleges and Universities and the Schools.

Having spent four decades grappling with the issues you identify, I am impressed by the forthright way you have identified the problems and designed a set of remedies. Both bills are premised on attracting more--and more able--candidates to careers in teaching. Both bills place an appropriately high priority on the attraction of more minority candidates to teaching; indeed, I am pleased that so many of the recommendations of the FEOL/Secretariat Minority Teacher Task Force are evident in these bills as they relate to one of the most persistent and important problems facing American education. Both recognize the importance of preservice and inservice education and both offer a mix of research and evaluation, demonstration and support. There are obvious strengths in both measures, which I hope will be included in the final bill, but together, they are probably the most comprehensive attempt to address the issues of teacher education since the **Education Professions Development Act** of 1967.

In the limited time available, I want to highlight a particular strength in each bill and urge that they become the center-piece for the final bill reported by this Committee. I urge that Title III of Senator Pell's bill (**Model Programs in Teacher Preparation**) be given greater prominence and support in the final measure. I have spent the last five years examining how we educate teachers in this country. The study I have conducted with my colleagues is the largest study of its kind ever undertaken. Through surveys and interviews and visits to representative teacher education institutions, we have gathered a formidable amount of information on teacher education.

What we will report next October is that America's teachers are ill-prepared to teach either academics or civic responsibility (of the kind promoted by Senator Pell's "Statement of Findings"); they are ill-prepared to make improvements in their schools; and, most important, that no one seems willing to take long-term responsibility for teacher education. We will offer a vision of what a good teacher program should look like-and, we will show, step by step, just what needs to be done. We will challenge universities and colleges, schools and school districts to enter into new forms of partnership and create new structures to prepare teachers.

Resources will be needed to design these 'Model Programs in Teacher Preparation', to prepare 'replacement' faculty, to refashion undergraduate programs of general education, to strengthen the academic degrees for prospective teachers, to develop new clinical arrangements with schools, to infuse current programs with recent research findings on cognition and instruction, on motivation and reinforcement, and to create new forms of governance and support. Hopefully, Title III of S. 1676 could be a source of support for institutions that are serious about transforming themselves.

I say 'serious' because that is exactly what is needed! Let me say before this Committee that I believe that many of the current attempts to reform teacher education are simplistic and thus do more harm than good. Simply getting rid of 'Mickey Mouse' courses or requiring everybody to have an additional degree won't solve the problems of getting good teachers into the schools. National certification tests won't solve the problem nor will alternative certification programs. The danger is that adoption of these simplistic 'solutions' will imply that we've solved the problem...when they are, in reality, shell games.

Let me indicate that reforming teacher education without changing the undergraduate curriculum will accomplish little. The present undergraduate curriculum is inadequate for prospective teachers. One of the most commonplace reforms is that prospective teachers should have an undergraduate degree in an academic major, followed by a fifth year of education courses. More content that is irrelevant to the needs of youngsters isn't the answer. We will urge the development of a pre-ed program for prospective teachers, just as there is a pre-med program for prospective doctors. During their pre-ed program, teachers must learn their subjects; at the same time they must be learning how to teach those subjects to youngsters in the schools. Hopefully, Title III can be reworked to give attention to this fundamental need.

Senator Kennedy's design for 'Professional Development Academies' (Title II of S. 1675) gives prominent attention to the need for schools and teacher education programs to cooperate in the clinical training, induction and professional development of novice teachers. This theme of partnership should be a fundamental part of all aspects of both bills. The reconstruction of teacher education and the restructuring of public education must go hand in hand. We cannot deal with the problems of one without dealing with the problems of the other at the same time. And both have problems.

New teachers come into the schools, armed with idealism and, sometimes, with new ways to help students learn. But they run up against 'we've always done it this way'; or, 'you can't change things anyway, so why bother?' Many novice teachers become discouraged. Many quit teaching. Of those who stay, many just end up trying not to rock the boat! It doesn't make sense to prepare teachers to fit into the kinds of schools we have now. At the same time, it doesn't make sense to design new teacher education programs in isolation from the schools. We need new and better schools; and, we need to prepare teachers to work effectively in those new and better schools. Hopefully, as you consider the ways that the two bills will be combined, this principle of the "simultaneous renewal of schools and schools of education" can undergird your work. Hopefully, each title and section of those titles can assure that teachers and teacher educators will fashion effective and ongoing partnerships to promote the reform of teaching.

One of the most distressing findings of my earlier study A Place Called School was that teachers don't know how to teach about the responsibilities of living in a democracy. Senator Pell has highlighted this in his "statement of findings" when he says that there is "no clear understanding of the history and principles of the Constitution and Bill of Rights, with little or no sense of the rights and responsibilities of citizenship." There is a lot of difference between preparaing students to live in a democracy and preparing students to live in a totalitarian state. And there is a lot of difference between what you expect of teachers in a democracy versus teachers in a totalitarian state.

One of the most troubling findings of our current study is that few teacher education programs give serious attention to the understanding of democracy and what it means to teach students their moral and intellectual responsibilities for living in a democracy. In The Moral Dimensions of Teaching (Jossey-Bass, February 1990) and Teachers for the Nation's Schools (Jossey-Bass, October 1990) I will stress that the moral dimensions inherent in the nature of teaching and the responsibilities of teaching in a democracy must be dual tenants of all teacher education programs. This is an agenda that I will promote independent of this legislation but one that must be attended to by colleges and universities.

Finally, Senator Kennedy has included in his bill a Teacher Recognition title that will recognize outstanding teachers. I commend him for that initative. Let me suggest a parallel recognition program for outstanding university administrators. Responsibility for teacher education must start with the college or university president. Teacher education must be given its rightful share of resources and support. No longer can we afford for teacher education programs to be the "cash cow" for the college or university. There are basic standards that must be met in order to have a teacher education program that is intellectually and ethically defensible. College and university presidents must act to fulfill that responsibility. When they do, they deserve recognition. When their programs fail to meet those standards, the university should think seriously about whether they should be preparing teachers.

Let me reiterate my appreciation for the opportunity to appear before this Committee and to offer to you my congratulations for two worthy and important pieces of legislation.

The **Chairman**. Thank you. That advice goes to other areas of social policy as well. I think of the health care example, something that we still haven't learned.

Dr. Johnston.

Dr. **Johnston**. Mr. Chairman and Senator Cochran, I'm the Director of the Schenley High School Teacher Center in the Pittsburgh public schools, the second largest school system in Pennsylvania and one of the largest in the Nation. I'm pleased to appear before you this morning on behalf of the Council of Great City Schools.

I might also say, as one who has devoted her life to teaching and learning, I know that the research tells me that the prime position for learning in any session is the beginning and the end. So I have a wonderful opportunity to influence your thinking.

I also want to thank you for the opportunity to testify on the pending bills for the Council on teachers and teaching. I got my start in the Teacher Corps as a Teacher Corps team leader, so I guess I'm the second person you were talking about today. I'm also pleased that one of my Council colleagues, Joe Fernandez, testified before you about this same time last year on this same topic, and that you were able to visit some of Dade County's excellent teacher programs. Let me say that while the weather may not be as warm in Pittsburgh, the welcome would be, if you would like to see what we think are even better ones. So please make an effort to come.

The **Chairman**. Thank you.

Dr. **Johnston**. With your permission, Mr. Chairman and Senator Cochran, I'd like to focus my remarks this morning on three areas, although I'm going to gloss over two of them since I think my colleagues who have testified before you have covered them. I think we have to in urban education look at the challenges that urban schools face in the area of teaching, and certainly you've heard a great deal about what those challenges are. What I would like then to focus on are the programs that we've instituted in Pittsburgh to meet those challenges, particularly in the area of training. And might I say that I personally wish that these bills had been around before because it would have cost our district, and we might have had some help in doing what we've done.

In effect, I think I can offer Pittsburgh as a living experiment or a living laboratory for the very kinds of things that you're suggesting. And so if I could, I'd like to turn to those.

In 1981, 2 years before the publication of "A Nation At Risk," the Pittsburgh Board of Education identified staff development as its main priority. Eighteen months of planning followed, that involved over 200 teachers, administrators and others in putting together a program resulting in a training program, a professional development program at Schenley High School. In effect, it reflects a lot of the proposed legislation around professional development academies.

In the first 4 years of the program, from 1983 to 1987, over 900 secondary teachers participated in the Center's activities. What this meant was that the high school teachers in Pittsburgh left their regular classrooms and went to Schenley, one of the 12 secondary schools, where they worked in groups of 48 for a period of 8 weeks. It has been characterized by many as a mini-sabbatical.

The essential goals of that program were to improve instructional skills among the teachers who were practicing professionals; to increase sensitivity to the culture of adolescents, particulary in a multicultural environment; and to update teachers' knowledge in specific content areas. As Dr. Goodlad so aptly said, it is impossible for teachers who have been out of college classrooms for 10 to 20 years to be continually updated in their subject area.

In order to meet the goals that we had, visiting teachers participated in a wide range of teacher-led seminars and classes and had the opportunity to visit a variety of programs in the larger community. The success of the Center was assured by its resident staff who not only taught the students at Schenley, some 1,000—approximately 60 percent black, 40 percent white student population—but they were also responsible for conducting and developing seminars which they then led for other teachers. In effect, I think the heart of the program were the 25 resident teachers which were assigned one or two visiting colleagues per cycle, and they would plan instruction with the visiting teacher, observe the visiting teachers, and confer with them about their methods.

In a second program which speaks again to something which is in the legislation, in 1986 the challenge was to continue the momentum we'd begun at Schenley, and so what evolved was a concerted effort to make each high school a Center of Excellence. To accomplish this, staff at each high school reviewed district-wide goals, selected a particular one, then designed what we called a "Center of Excellence project."

In other to fund those Centers of Excellence projects, we went out and found corporate and foundation funding so that each school based on shared decision-making could, in fact, acquire approximately 15,000 a year. We've had some interesting results from those Centers of Excellence projects which are now in their third year, one of which I will mention because, again, it's in the legislation.

Teachers at one particular high school decided that what they wanted to do was to develop a teaching academy, a program designed by teachers to attract high school students to the teaching profession. So I think that it speaks to the teachers in Pittsburgh that they were prescient enough to know that that was something that was needed.

I also want to make the point that the success of these programs rested on our district's commitment to sharing decision-making authorities with teachers and providing greater teacher professional development activities.

A third initiative is now under way which, again, speaks to some of the information that Dr. Goodlad shared with you. We are one of seven school districts across the United States that is participating in the Ford Foundation-sponsored school district/university collaborative, and we have been working over the course of the past year-and-a-half with three universities—Duquesne University, Indiana University, and University of Pittsburgh—in collaboration to, as we say rather modestly, restructure teacher education. I think the reasons for that are very clear, and I don't need to repeat what Dr. Goodlad said.

But the goal of the collaboration in Pittsburgh is to prepare student teachers and interns to be effective instructors with special attention to teaching in a multicultural environment. A major focus, of course, for the program is recruiting minorities into the teaching profession. The Pittsburgh Board of Education has set a goal of increasing the number of minority teachers in the district from 20 percent to 35 percent by 1993. To achieve this goal, not only have we been working with these universities, but we've been working with historically black colleges—for example, Hampton Institute, which this spring will provide six African American student teachers to take part in the clinical experience at Schenley. In addition, the district and the University of Pittsburgh are actively seeking foundation funds to provide stipends for minorities who may wish to enter teaching from other professions. That, in effect, is what is happening in Pittsburgh.

In terms of the third part of what I'd like to talk about, what the Federal Government can do, again, I don't know that there's much that I can add to what has already been said. The Council is proud to have had the Teachers' Professional Development Act, S. 498, introduced on its behalf by Senator Pell and cosponsored by you, Senator Kennedy. We are most enthusiastic about S. 1675 and 1676.

In effect, anything else that I might say is in the testimony, and so rather than take your time, I won't go through that. That concludes my testimony, and I'd be happy to answer questions. Again, I congratulate you and Senator Pell for your leadership.

[The prepared statement of Dr. Johnston follows:]

Testimony on Teacher Recruitment and Development Legislation

Before The

Committee on Labor and Human Resources

On Behalf of

The Council of The Great City Schools

Mr. Chairman, my name is Judy Johnston. I am the Director of the Schenley High School Teacher Center in the Pittsburgh Public Schools, the second largest school system in Pennsylvania and one of the largest in the nation. I am pleased to appear before you this morning on behalf of the Council of the Great City Schools.

Currently in its 34th year, the Council of the Great City Schools is a national organization comprised of 45 of the nation's largest urban public school systems. On our Board of Directors sit the Superintendent and one Board of Education member from each city, making the Council the only independent education group so constituted and the only one whose membership and purpose is solely urban.

The Council's membership serves over five million inner-city youngsters or approximately 12% of the nation's public school enrollment. About one-third of the country's African-American children, 27% of its Hispanic children and 20% of the nation's Asian children are being educated in our schools. Nearly 30% of the nation's poor children are found in our forty-five cities.

Mr. Chairman, I thank you for the opportunity to testify on the pending bills on teachers and teaching, a subject I have devoted my career to. I received my start in the old Teacher Corps, a program I am pleased to see you reauthorizing. I am also pleased that one of my Council colleagues, Joe Fernandez, testified before you about this time last year on this same topic, and that you were able to visit some of Dade County's excellent teacher programs. While the weather may not be as warm in Pittsburgh, the welcome would be if you would like to see even better ones.

With your permission, Mr. Chairman, I would like to focus my remarks this morning on three areas: 1) the challenges that urban schools face in the area of teaching; 2) the programs that we have instituted in Pittsburgh, to meet those challenges, particularly in the area training; and 3) the provisions in the pending legislation that urban schools find so helpful.

A. Urban Challenges in Teaching:

First, we see the challenges to cities falling in three broad categories: attracting teachers, retaining teachers and training teachers.

1. Attracting Teachers: While many debate the extent of the pending national teacher shortage, the problem for cities is here and now. It is a five-part problem:

   a) Persistent Overall Teacher Shortages: Teacher shortages in urban areas are 2.5 times higher than in other kinds of school systems, according to the National Education Association, and the gap is growing. In general our teachers are older, have more teaching experience and have been in-system longer than average. At the same time, our new teachers turn-over more rapidly than average.

   b) Specialized Area Shortages: Sometimes, the number of vacancies are deceptive because districts may have enough teachers overall but suffer from shortages in specialty areas. Shortages of math and science teachers are common but the need for urban teachers in special education and bilingual education is critical. The result is often that districts must assign teachers out-of-field or issue emergency or alternative certificates, strategies often unacceptable to teacher unions.

c) Shortages of Minority Teachers: The nation is also experiencing a well-documented shortage of minority teachers. African-American teachers have now fallen below 7% of the nation's total teacher pool at the same time the percentage of African-American students has risen to about 17% of the enrollment. The truly dramatic disparities are in our own cities where, in the aggregate the student enrollment is about 70% minority, 30% non-minority; yet, the teaching force is about 32% minority and 68% non-minority.

d) Lack of Interest in Teaching in the Inner Cities: The sad truth is that most teachers would rather teach almost anywhere other than the inner-city. One explanation is that 80% of new teachers want to teach within 50 miles of their home, and only 1 in 20 call a big city home. The upshot is that only 16% of current teacher education students want to teach in an urban school. The problem is made worse by negative perceptions of urban schools. One solution, of course, is for us to grow our own teachers. Dropout rates of 25%-to-40% in some cities, however, eliminate many candidates; others move into vocational, technical trades or the military; some pursue college but only half finish -- and those who do usually pick other careers. By that time, the pipeline of potential teachers for urban schools has narrowed to a soda straw.

e) Disappearing Salary Differentials and Low Pay: Urban schools have relied for a long time on higher salaries to coax teachers into the inner-city. But this differential has almost disappeared, as states responded to the Nation-At-Risk report in 1983 by uniformly raising teacher salaries, negatively affecting cities. In 1980-81, urban schools paid their teachers about 10.6% more than the national average; by 1987-88 they paid them just 3.5% more. Teachers, in general however, continue to be paid well below their value to society, thereby damaging all schools' ability to attract qualified people.

2. Retaining Teachers: While most of our teachers are pleased with their career choice, urban teaching is not easy. We cannot gloss over our substandard facilities, overstretched resources, students with profound problems, and the social environment outside the school yard.

   a) Inferior Working Conditions: A recent study by the Institute for Educational Leadership (IEL) concluded that urban teachers work under conditions that are dramatically worse than other teachers. These conditions include cramped and crumbling buildings and facilities, heavier workloads and larger class sizes than average, fewer resources and books, and more discipline problems. All of these factors make it more difficult for urban schools to keep teachers once they have been recruited.

   b) Lack of Decision-Making Authority: Perhaps more important are the professional frustrations of teachers: lack of respect and recognition, limited opportunities for collegiality, inadequate professional development, and lack of decision-making authority. In fact, the lack of professionalism is second only to low salary as the reason teachers give for leaving teaching.

3. Training Teachers: To meet our nation's future demands, today's teachers need to be highly qualified professionals, knowledgeable about their subjects and methods. Recent reform reports, including the Carnegie Report, suggest we are far from achieving that goal. Too often, low ability students seek schools of education, and once they are hired schools often do little for their professional growth.

a) Inadequately Prepared Teachers: Today's teacher is better educated, more experienced and harder working than the teacher of a decade ago. Still, the training teachers receive is rarely sufficient to prepare them to be inner-city teachers. Most urban teachers, in fact, rate their education courses as inadequate in preparing them for life in a big city school.

b) Lack of Inservice Training: Finally, teaching requires ever greater levels of in-service training. This is especially true in cities where changing demographics and high needs place new demands on teachers to find successful instructional strategies; where technology is constantly changing; and where new reform efforts are placing more decision-making power in teachers' hands.

B. What We Are Doing About The Teaching Challenges:

These challenges appear insurmountable but there is much urban schools are doing to address them. I call your attention to our report, Teaching and Leading in Great City Schools which describes over 180 urban programs designed to boost the pay, the status, and the performance of teachers. Let me take a moment to describe what we do in Pittsburgh, particularly in the area of teacher training.

In 1981, two years before the publication of A Nation at Risk, the Pittsburgh Board of Education identified staff development as its main priority. Eighteen months of planning followed that involved over 200 teachers, administrators, and central office personnel resulting in the training program at Schenley High School. In the first four years of the program (1983-87), over 900 secondary teachers participated in the Center's activities. Teachers came in groups of 48 for eight weeks at a time during the school year (four cycles per year).

The essential goals of the program were to (a) improve instructional skills; (b) increase sensitivity to the culture of adolescents ; (c) update knowledge in specific content areas; (d) disseminate information about district-wide educational improvement initiatives; (e) provide opportunities for personal and professional growth; and (f) encourage the development of individual teacher plans for continued progress.

In order to meet those goals, visiting teachers participated in a wide range of teacher-lead seminars and classes and had opportunity to visit a variety of programs in the larger community.

The success of the Center is assured by its "resident staff" who teach the over 1,000 students at the high school, albeit with reduced teaching schedules, and develop and conduct seminars for visiting teachers on a wide range of educational topics and methods. Twenty-five resident teachers, are each assigned one or two visiting colleagues per cycle. They plan instruction, observe visiting teachers and confer with them about their methods.

In 1986, the challenge was to continue the momentum begun at Schenley, and to maximize the return on the school district's investment. The result was the "Centers of Excellence" program, a concerted effort to make each high school a center of excellence.

To accomplish this, staff at each high school reviewed districtwide goals, selected a particular one, then designed a "Center of Excellence project" to support it.

For example, one of Pittsburgh's goals was to close the black-white achievement gap. Projects were then established where groups of students worked cooperatively on a teacher-defined task. After just one semester, Schenley demonstrated a ten percent rise in the number of minority students passing each subject.

Another Center of Excellence project resulted in a magnet Teaching Academy, a program designed by teachers to attract high school students to the teaching profession, a goal of all the bills pending before this Committee.

The success of these programs rested on the district's committment to sharing decision-making authority with teachers, and providing greater teacher professional development activities. Each participating school had someone specifically assigned to facilitate the process of providing each of these components.

A third initiative now underway involves the school district and three local universities in collaboration to provide better teacher education. A year long planning effort, funded by the Ford Foundation, resulted in a program to promote teaching as a decision-making activity.

The goal of the collaboration is to prepare student teachers and interns to be effective instructors. The program provides a supportive environment in which the student teacher/intern can teach and learn about teaching, with special attention to teaching in a multi-cultural urban setting, and working with parents, students, and other professionals within the community.

Presently, the School District/University Collaborative operates at two Pittsburgh public high schools in conjunction with Indiana University of Pennsylvania, Duquesne University and the University of Pittsburgh. Although operationalized somewhat differently at each site, the program is characterized by an intensive clinical experience.

A major focus of our program is recruiting minorities into the teaching profession. The Pittsburgh

Board of Education has set a goal of increasing the number of minority teachers in the district to 35% by 1993. To achieve this goal, the district is working with traditional black colleges, like Hampton Institute, which will supply six African-American student teachers this spring to take part in a clinical experience at Schenley. They will also take courses at Duquesne University.

In addition, the district and the University of Pittsburgh are actively seeking foundation funds to provide stipends to minorities already holding a bachelors' degree who may wish to enter an intern program leading to teacher certification as well as a master of arts in teaching.

C. What the Federal Government Can Do:

The Congress has an important role to play in helping us recruit, train and keep qualified teachers, particularly in urban areas. The legislation before us today is an excellent start. The Council is proud to have had the "Teachers' Professional Development Act" (S.498) introduced on its behalf by Senator Pell and cosponsored by Senator Kennedy. We are most enthusiastic about S.1675 and 1676, and congratulate both Senators on their leadership.

I would like to describe the components of each of these three bills we are particularly pleased with.

1. Class size research and demonstration.

Urban schools have particular difficulty with large classes because of inadequate resources to hire more teachers, the layout of our buildings, and extremely large numbers of immigrants. The proposal in S.1676 to conduct research and demonstration projects on the effects of class size is most welcome.

2. In-Service Teacher Training.

Each of the three bills (S.498, S.1676, S.1675) contains provisions for in-service teacher training but with different approaches. National-level teacher training academies are authorized through the states in S.1675, by formula in S.498, and by congressional district in S.1676. In addition, S.1675 authorizes discretionary grants to provide training in specialty areas, e.g., preschool education, bilingual education; and establishes a senior teacher corp for current teachers to pursue longer term intensive training.

The Council believes that all these approaches are constructive. We do prefer the National Academy structure established in S.1676 over that in S.498 because of the focus on subject area, and are very enthusiastic about the discretionary grant programs for bilingual, handicapped, preschool and math/science training in S.1675 because of the unique problems in each area. At the local level, the Council would like to see a blend of the approaches in S.498 and S.1675 with funds being formula driven but collaborations being required between LEAs and universities in school-based programs. We are less attracted to the Congressional district academies because of their lack of correspondence with recognized school boundaries, but we do believe the idea has merit. The use of funds from all three bills ought to be combined.

3. Teacher Professionalism and Decision-Making.

Both S.498 and S.1675 contain provisions to boost the professional status of teachers by pilot testing various approaches to school-based management and decision-making. S.498 goes slightly further by authorizing tests of other professionalism-enhancement approaches like incentive pay, mentor teaching, career ladders and others. We would like to see both bills meshed on this topic, but using the broader approach in S.498. We would also like to see the federal government's role in school-based management limited to evaluating these locally-developed approaches and disseminating information on them rather than defining what they should be or assuming their merits.

4. PreService Teacher Training.

All three bills contain provisions for pre-service teacher training. S.498 establishes a fifth year of college for education majors in collaboration with urban school systems; S.1676 authorizes model teacher preparation programs; and S.1675 has preservice university collaboratives woven throughout. We believe all these provisions make sense.

5. Teacher Recruitment.

And all three bills contain very substantial proposals for recruiting new teachers, particularly minority teachers and teachers for urban areas. The Council particularly likes the minority teacher recruitment provisions in S.1675 and the local recruitment provisions in S.498. We like the proposal in S.498 to increase the number of minority teachers by upgrading the credentials of current teacher aides (who are more likely to be minority than the general teacher force) and by providing seed-monies for local "grow-your-own" programs.

All three measures contain loan forgiveness proposals or scholarships as incentives to enter the teaching profession. All seek to bring additional minority teachers into the profession. While all are attractive, the Council is particularly fond of the scholarship proposal in the Teacher Corp section of S.1675 providing incentives up-front and forgiveness for those entering teaching in clearly defined inner-city schools. This provision is one of the most attractive provisions of any of the pending proposals.

Mr. Chairman, that concludes my testimony. I would be happy to answer questions. Again, I congratulate you and Senator Pell for your leadership on these bills. Thank you.

SELECTED STATISTICS ON URBAN SCHOOL TEACHERS

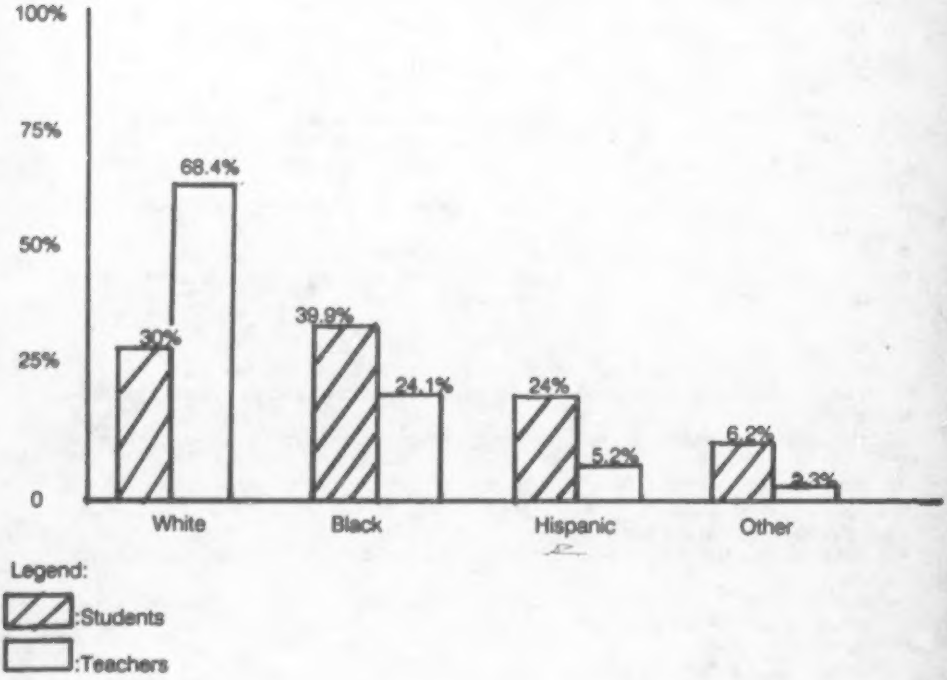
Number of teachers in Great City public school systems: 272, 084
Percentage of teachers in Great City Schools who are minority: 85,978 (32%)
Percent of nation's minority teachers working in Great City Schools: 56%

Average years of experience of teachers in Great City Schools: 15
Average number of days on duty for teachers in Great City Schools: 186
Average pupil/teacher ratio in Great City Schools: 18.7:1
Average salary of teachers in Great City Schools, 1987-88: $29,218

Number of new minority teachers that would have to be produced annually to fill the current demand for minority teachers (based upon the percentage of minority students): 50,000
Approximate number of minority college students graduating with degrees in education annually: 14,000
Percent of current teacher education students who want to teach in an urban school as their first assignment: 16%
Percentage of general teaching force that will be black in 1990: 5%
Extent of teacher shortages in central city schools as compared to the extent of teacher shortages in all schools: 2.5 times the shortage

Percentage of city teachers who feel respected by society: 39%
Percentage of urban teachers who would not teach if they could start over: 13%
Percentage of urban schools where teachers rate professional development opportunities as inadequate: 58%
Percentage of urban teachers who report having no say in selecting textbooks or materials: 36%
Percentage of urban schools where teachers report working in inadequate buildings: 52%
Average number of students more per day a big city teacher teaches than a small-district teacher teaches: 23 more students
Average number of hours per week urban teachers spend on instructional duties without pay: 9.2 hours
Percentage of urban schools where teachers rated their resources as inadequate: 81%
Percentage of current education majors who report being inadequately trained to deal with "at-risk" students: 29%
Percentage of urban schools where teachers report poor student discipline: 77%

COMPARISON OF RACIAL COMPOSITION OF GREAT CITY SCHOOL STUDENT AND TEACHERS



The **Chairman**. Thank you very much.

Dr. Goodlad, before getting into some of the other kind of more technical questions you were talking about, you mentioned just briefly in your testimony that teachers aren't taught how to teach students the moral and intellectual responsibilities for living in a democracy. We battle around in various ways on this question about teaching morality, and legalists have defined some years ago about secular humanism. Everybody was bandying that word around; no one quite knew what it meant, I don't think.

What are you talking about here? What should be the kind of guidance you have? That's probably not related directly to the bills although it's obviously related to, I think, what are common interests to the members of the committee and parents.

Dr. **Goodlad**. Well, I think our tendency in this area is to get to a level dealing with differing values in moral behavior, which is very important. But what I'm talking about here is the fact that we're living in a democracy. Life in a democracy and life in a totalitarian State are quite different. Teachers are teaching in a democracy; they're not teaching in a totalitarian State. That's quite different.

It seems to me that we should be absolutely certain that our teachers are fully familiar with not only what is in the Bill of Rights but the discussions surrounding it, that they be fully familiar with our Constitution and the degree to which we fall short of the values that are embedded. And if we cannot be certain that our teachers have had the kinds of general studies that prepare them to understand those differences and who understand that history and who understand those values that are deeply embedded, we could hardly expect those teachers to deal effectively with what it means to grow up as a citizen in a democratic society, which means something more than "I'll get mine first." It means there are responsibilities, there are commitments that we must expect of our young people.

Teachers need to fully understand that there is only one institution in our society specifically committed to that task, and that's the school. Therefore, they are stewards of the school, and they are stewards of the school in a democratic society. And almost all the attention to whether or not a teacher is prepared to teach focuses on the more or less technical behavior, the mechanistic behavior of the classroom. And if all we do is to assign a teacher to a future teacher, they don't have any understanding of the degree to which the policies and the practices of the school can deny to some the rights of growing up prepared to live in a democratic society.

Dr. Hatton touched on some of these when she was referring to the inequities of schooling. In our discussions with many futures, they seem not to understand that all children have a right to learn, and they were much more focused on those who can learn have an opportunity to have the best access to knowledge. That's pretty fundamental, and it seems to me needs to be part of not only the intellectual process of becoming a teacher, but the socialization process, a socialization process which must occur. If we have an alternative program to get to become a teacher, we must be sure that that kind of socialization is occurring.

The CHAIRMAN. I am chairman of the Madison Foundation, which was a result of the Bicentennial Commission, that is to try to assure that every State will have two high school teachers—and we spell out the criteria—to teach constitutional studies as part of the enduring legacy. It's actually received some underwriting by the Congress, and it's in the process of its formulation. But that is certainly something I have a particular interest in.

Let me ask you about the alternative certification issue. I understand that some of the AACTE have indicated opposition to alternative certification because it might bypass your members. Would you comment on that?

Dr. GOODLAD. Yes, I'd be pleased to comment on that. I represent that Association today, of course, as its president of 720 teacher-preparing institutions out of some 1,300.

The AACTE position is to encourage alternative routes to certification. It does not encourage alternative certificates. When we talk about an alternative certificate, it sounds as though we're talking about a different kind of outcome. What we're talking about are different routes to the same outcome, which is to be a good teacher. Therefore, our interest in alternative routes is: Do they socialize teachers into what I have just been talking about? Do they provide for teachers assurance of understanding their subject matters? Or do they admit people with 20- or 30-year credentials, out of date, without further word? Do they provide the necessary experiences in pedagogy? Do they assure placement not with simply a mentoring teacher, but in an exemplary school setting?

If all of those things are in place, we not only welcome alternative routes, we would encourage them.

The CHAIRMAN. Your organization has taken a particular interest in the problem of tackling the minority teacher recruitment. I think you spoke to that issue in general ways in your earlier comments. I know you have more elaborate testimony. I don't know whether there's anything else that you might want to add relative to the particular pieces of legislation which are before us.

Dr. GOODLAD. I would just reiterate that we need to be very careful not to assume that there are out there percentages of very able black minorities who are not being reached by the recruitment effort. I applaud what David Rockefeller is doing to make the opportunities in teaching so widely known. In doing that, which I commend, we need also to recognize the large numbers of minority students who are first generation college students coming to college with highly disadvantaged backgrounds because of the inequities in the elementary and secondary system who need to be supported at that critical point. And it's going to cost more money than is proposed under the cap that's currently existing.

This issue has been discussed extensively by the 40-some organizations that come together here in Washington from time to time to discuss this issue.

The CHAIRMAN. Maybe you've answered this about any particular good models of partnerships between local districts and institutions of higher learning. You give me at least the impression that you didn't know of any in the country. I don't know whether I'm right in that impression or not.

Dr. **Goodlad**. There are some embryonic ones. There are some that are beyond the embryonic stage which we've just heard about from the Schenley experience, which is well established and to be applauded. We created in our work 5 years ago what is called the National Network for Educational Renewal, and it consists of 13 universities with their surrounding school district to join together in the partnership I referred to within which we hope to create exemplary teacher education settings.

Let me simply tell you that this is very, very hard work. It sounds natural, but universities are not accustomed to joining in partnerships with their former students in the schools. The schools are sensitive to university people looking over their shoulder and coming to the classrooms. The collaboration is very difficult. That's why I'm delighted to see in your initiatives a time; that is, you're proposing five-year grants, and that is going to be absolutely necessary. We've found it takes three to 5 years to get these enterprises off the ground.

The **Chairman**. Dr. Johnston, you talk about the difficulty in recruitment of minority teachers in the urban areas. Why isn't the problem just as severe in rural districts where the population is smaller and more widely scattered?

Dr. **Johnston**. I think the problem probably is just as severe, but I think in the urban areas, when you look at the student population in urban areas, you're looking at over 70 percent minority enrollment and approximately 32 percent minorities in teaching. If children are to succeed, if they are going to have a vision of what they can be in life, they have to have role models. And what we're finding is that there certainly aren't enough role models out there. Also, the need exists to have minorities in teaching. I think Barbara Hatton touched on that very well.

The **Chairman**. You served as a Teacher Corps team leader when the program was run in the early 1970's. How did it kind of influence your own career? Can you tell us a little bit about that?

Dr. **Johnston**. Oh, it's been so long ago. Well, I think what it caused me to understand is a lot of what I'm talking about today. Certainly if we're going to attract, as the saying goes, the best and the brightest into the teaching profession, there have to be ways in which those people can learn and can understand what teaching is all about. Teaching is a very complex decisioning activity. It's not a simple process. And so I think in that respect it certainly helped me. It provided me with the opportunity to continue my education as well as have an impact on Teacher Corps interns who were learning to teach.

As an aside, I might also add that maybe the down side of it is that those Teacher Corps interns, with the exception of one that I worked with, are all still in education. But only one of them is in a classroom now teaching; the others have moved into prominent administrative positions. I think that's probably one of the problems that we face in education in that people who go into teaching and are good frequently, as someone talked about today, are recruited out of the classroom and into other positions. But it was a very powerful influence.

The **Chairman**. OK. Senator Cochran.

Senator **Cochran**. Thank you, Mr. Chairman.

One question simply for clarification of a point. Dr. Goodlad started off his testimony talking about how we shouldn't get into a situation where minorities are recruited and then put in a position of repeating a minority experience, that this would have a negative influence on the program or the effort. And I got lost trying to figure out how we legislate in such a way that we prevent that from occurring.

As a Republican Member of the Senate, I enjoy minority status in that regard, and I was trying to think—not strictly from my personal point of view, but how can we prevent by passing legislation that from occurring as a practical matter?

Dr. **Goodlad**. I think there are elements in the initiatives now that are in the right direction, and Dr. Hatton developed those more. I'll approach it from a somewhat different way.

When one looks at recruitment efforts in teacher education, they often are at a advanced level in the educational system; that is, trying to recruit the people who are already coming to college or who are already there. In, for example, the field of engineering, it is just standard practice for the school of engineering in the university to go right down into the high schools and find the students who might want to become engineers, persuade them, and recruit a cohort group which is brought to the campus, entertained, introduced to the faculty, to the laboratories and the rest.

We don't operate like this in teacher education. We tend to do it on an individualized basis. What we need to do is to go into community colleges and secondary schools and find clusters of minority students who come in as a cohort group who are not retained as a cohort group but who join the mixed group of students where they represent 20 to 40 percent of the total enrollment rather than four percent of the total enrollment.

Therefore, what I'm really saying is there should be a concentration of effort. For example, I had a telephone interview before coming here for someone who is doing a study for the Rockefeller Foundation and made reference to David Rockefeller's program that you heard here this morning. One of the things I said in commending that program was: If those minority students who are being recruited could then be guided toward settings where they are not going to be two or three or four percent of the student population, it would be a richer experience for you. The Republican representation in the Senate is not a three or four or even ten percent.

Senator **Cochran**. You're right. Thank you very much. I appreciate your further explanation of that. It sounds certainly reasonable and a goal that we ought to pursue, I think.

The only other question that I have—and Dr. Johnston may have touched on this. I thought I heard you say in your remarks something about school-based management.

Dr. **Johnston**. Yes.

Senator **Cochran**. One of the questions I wanted to ask today of some witness was to help me better understand how this is going to work in practice so that I'm convinced this ought to be a part of the bill. I come to this process, and I'm skeptical about whether or not it's appropriate for us to include in the final version of this bill that's reported to the Senate Title VIII, which provides some grant money as incentives for local education agencies to establish school-based management training programs and professional development academies as mentioned on page 85 of the bill. This is a section that is interesting to contemplate.

I wonder whether or not this, again, is another buzz word. The chairman mentioned secular humanism as something that is sort of a catchy phrase that caught on at some point and was used by many people without maybe fully understanding what it meant. I'm not sure we know what this means either in practice. Is it a new buzz word, a new phrase? And are we going to have to develop later what it really means? Are we creating a hydra-headed monster on the school campus that really prevents decisions from being made rather than as a catalyst for making better decisions?

Dr. **Johnston**. Yes, to all of the above.

Let me say that, first of all, school-based management or shared decision-making plays out in a variety of ways in different school districts. I don't know that there is one way that is best. In terms of the legislation, I would encourage you to keep in the teacher professionalism, shared decision-making; however, allow individual districts some decision around how that should unfold. That sort of flies in the face of shared decision-making to have people tell them they have to do it and then tell them how they have to do it.

Let me just share with you how it works in Pittsburgh, and I don't know that we're so different from a lot of other districts where it's tried.

Each high school—in fact, each school in our district has an instructional cabinet, which is comprised of administrators and teacher leaders, all of whom have received training around shared decision-making. You may question, well, why does someone have to be trained to share in decisions, but if you look at the culture of schools, you'll come to understand that for long periods of time teachers haven't had much say about how things get done. Their decisions have been limited to the span of time that they're working with students. And so we now in Pittsburgh have cabinets that do meet regularly, that within the context of that meeting are discussing and making decisions around issues of instruction related to students in the building.

There is some thinking and probably some research that will verify the fact that the decisions that teachers make around students or decisions that get made around the instruction of students are better decisions when they occur close to where those decisions are implemented, which are in the classrooms of the students.

I for one want to encourage you to keep that in, and perhaps the bottom line around that is—and we have some research that indicates that there are very powerful things that happen when teachers begin to share in decisions around students.

One of the powerful reasons I think it should be there is that I think it's one way that we can retain good people in education. We can't take people, educate them, put them in classroom, and, as Al Shanker says, treat them like hired hand and expect them to stay. They have to have some say in what happens, how it happens, and with whom it happens.

Senator **Cochran**. Thank you very much.

Thank you, Mr. Chairman, for the excellent hearing. All the panels have been really helpful to us and to me personally. Thank you.

The CHAIRMAN. We have one of our most active members of our committee, Senator Simon, who has spent an enormous amount of time on education and has been very much involved in the shaping and fashioning of education programs. We're delighted to have you.

Senator SIMON.Thank you, Mr. Chairman. I regret, because of another meeting, I was not able to be here for the hearing.

I would just underscore two basic points: We're going to have to pay teachers more; we're going to have to increase standards for teachers. Those are the two basics.

A very interesting study was done by Harvard on foreign language teaching, and it was an attempt to determine to what extent the various audio-visual aids made a difference in acquiring foreign languages. And after they finished the whole study, they came to one conclusion. If you had a good teacher, you learned; and if you didn't have a good teacher, you didn't learn. That really is basic.

What we have to do is simply, as Senator Kennedy has pointed out over and over again, we're going to have to make a greater priority out of education. I regret I have not heard the testimony of the two witnesses or the other witnesses, but I appreciate your leadership in this area. And I thank you, Mr. Chairman.

[The prepared statement of Senator Simon follows:]

PREPARED STATEMENT OF SENATOR SIMON

Senator PELL. I want to commend Senator Kennedy for holding this hearing on teacher recruitment and training. Meeting the4 demand for good teachers in the 1990's will require unprecedented commitments not only to recruitment, but to retention and retraining as well. I was involved in the early development of the Kennedy teacher training bill (S. 1675), and I am proud to be an original cosponsor of that measure and its complement sponsored by Senator Pell (S. 1676).

I have long supported efforts to reward excellent teachers and to encourage students to go into teaching. The Paul Douglas teacher scholarship program that I sponsored is now in its fifth year. Each year it has made approximately 3,000 grants of up to $5,000 to students who commit to teaching. The Christa McAuliffe Fellowship program, which I originally sponsored as the Talented Teachers Act, is now in its fourth year. It has provided funds each year for at least one experienced teacher in each State to engage in a special project in exchange for a commitment to keep on teaching.

There are also private and State-based scholarship programs for prospective teachers. Last year, for example, Chicago's Foundation for Excellence in Teaching selected its first "Academy Scholars." Fifteen students are receiving financial assistance in exchange for a commitment to teaching—and there are extra rewards if they teach in a Chicago school with large numbers of disadvantaged students.

These are good programs. But they are not enough to meet the demand for more than a million new teachers over the next 5 years. Now that virtually every State has a process for awarding

Paul Douglas scholarships and Christa McAuliffe fellowships, the programs must be expanded so that we can reward an excellent teacher in every congressional district, and provide larger scholarships for more students, especially those under-represented in the teaching profession.

In addition to being expanded, these successful programs must also be emulated. The Teacher Corps and Senior Teacher Corps in S. 1675 also use grants to encourage future teachers and to increase retention of current successful teachers. The Teacher Corps also provides funding for graduate education programs, which are increasingly being required of teacher applicants.

Sadly, the current and expected shortage of minority teachers is so severe that even these programs fully funded would not be enough to reach parity. More than 25 percent of all students in the United States are minorities, while only about 9 percent of their teachers are minorities. That's down from 17 percent in 1977. Current data suggest that by the turn of the century, a 5 percent minority teaching force will be education students who are more than one-third minority.

One explanation for the declining number of minority teachers is actually good news: Increased Opportunities. Teaching used to be one of the few professions open to women and minorities. As other career opportunities have opened up, fewer women and minorities are choosing to teach. In the past, school districts could get away with low teacher salaries and poor working conditions because discrimination kept women and minorities out of other professions. But schools must now compete for the best and brightest; they must treat teachers as the professionals they are. And that includes paying them the salaries they deserve.

While equal opportunity may help explain some of the decline in the number of minorities teaching, other explanations are more disturbing:

—With desegregation, many school districts stopped hiring black teachers. (In one State, for example, public schools added 16,632 white teachers between 1954 and 1988, but only 190 black teachers).

—The percentage of blacks and Hispanics finishing college continues to decline, reducing the pool of potential teachers.

—"Competency" tests for teachers in the early 1980's had a disproportionate effect on minorities. Many prospective teachers are inappropriately refused entry into teacher-training programs for failing to pass the NTE or other multiple-choice tests.

—The movement toward fifth-year teacher training programs has made it more difficult for low-income students to afford the education it takes to become teachers.

—Sadly, minority students have had few, if any teachers they can consider role models.

—With the decline in the status of teachers and the teaching profession, teachers, parents and counselors often discourage students from entering the profession.

With the minority teacher pipeline restricted in so many ways, no single strategy can ease the current and impending shortage. In addition to increases in the Paul Douglas and Christa McAuliffe programs, I am looking into a number of approaches to the minority teacher shortage, some of which are included in S. 1675 and S. 1676.

Again, I commend Senators Kennedy and Pell for moving swiftly on the teacher recruitment and training issue, and I look forward to working with them to develop an effective, comprehensive Federal approach.

The **Chairman**. Very good. Well, we want to thank all of you very much for coming. As we said, it's been very helpful. We think we have, over the period of years, had a strong bipartisan approach on this—for years under Senator Pell, Senator Stafford, under Senator Stafford and Senator Pell, Senator Simon, Senator Kennedy, Senator Cochran, and other members here. And we are very hopeful that we will be able to get both the legislation through, which I'm very confident of, and also, even with limited budget, that we'll be able to get a down payment on it. We have some important members of our Appropriations Committee on this as well as on the Budget Committee, on both sides of the aisle. So I'm hopeful that even in the announcement of the budget, which troubles many of us, particularly in the areas of education and other areas of human resources, that this one can get off the ground. So it's important that, as limited as the resources are, we shape it and fashion it and target it in ways that it can have the kind of result which has been the objective of all those who have commented here today. We thank you very much. You've been very helpful.

The committee stands in recess.

[Whereupon, at 11:55 a.m., the committee was adjourned, subject to the call of the Chair.]

EXCELLENCE IN TEACHING ACT

FRIDAY, FEBRUARY 16, 1990

U.S. SENATE,
SUBCOMMITTEE ON EDUCATION, ARTS AND HUMANITIES, OF THE
COMMITTEE ON LABOR AND HUMAN RESOURCES,
Providence, RI.

The subcommittee met, pursuant to notice, at 9:30 a.m., in room 102-B, Whipple Hall, Rhode Island College, Providence, RI, Senator Claiborne Pell (chairman of the subcommittee) presiding.

OPENING STATEMENT OF SENATOR PELL

Senator PELL. I am most pleased to be here today and to hold a hearing on this important legislation before the real experts on this issue; teachers and students. It is most appropriate that the hearing should be held on this campus, for it is here that generations of the finest teachers of our State have received their training in preparation for their careers in the classroom.

American schools reflect the conditions of American society. A weakness in one will result in a parallel weakness in the other. We all know of the many changes facing American society. As we begin these hearings, let us reflect for a moment on how these changes will affect the classroom of tomorrow.

First and foremost, the color of American society is changing rapidly. Today, 6.9 percent of all teachers are black, yet blacks make up 18 percent of our Nation's student body. This ratio is expected to change dramatically over the next 10 years, as the percent of black teachers drop to 5 percent while the number of black students rises to fully one-third of the total school population. Similar trends are predicted among the Hispanic population.

On the national level, we are also facing a teacher shortage. All in all, we will need one million new teachers over the next 5 years, yet if current trends continue, our colleges and universities will graduate only half that number of credentialed teachers. The teacher shortage is a particular problem to Western States, rural areas and some inner-cities.

Other changes in the classroom will be more universally felt and those of us in Rhode Island will not escape their impact. For example, an increasing number of school-aged children live in homes in which both parents work or in which there is only one parent. Common sense tells us that schools and teachers will feel the impact of these changes as children are shuffled from day care to school and back to day care again.

The impact of technological changes is obvious to all. Computers are in classrooms everywhere and many teachers are faced with new and intimidating hardware. To compound the problem, many young children know how to operate these modern devices much better than their teachers. The list is endless.

In short, we must rethink the role of our teachers. We must attract more teachers into the profession, guarantee a greater diversity of teachers and keep the current skills of teachers up to date. More importantly, we must assure teachers an appropriate place in society. Nothing disturbs me more than to hear of the low self-esteem teachers often have. It is, I believe, a reflection of society's view that teachers do not play as important a role as other professionals.

How ironic such a view is. Ours is a society which places great emphasis on physicians who doctor our bodies. We also place a high status on psychiatrists who heal our emotional problems. Lawyers are given great regard for their knowledge of the law. Yet, what little recognition we give to those who shape our children's original thoughts and actions. To those who teach the fundamental principals of law to the average citizen, we offer low pay. To those who spark the future doctor's first curiosity for science, we offer little societal recognition. To those who take on the emotional traumas of poor, handicapped and neglected children in their first interaction with their more privileged peers, we offer few incentives to strengthen and improve their profession.

It is this disparity between the importance of the teacher's task and the support our Nation provides those in the profession that is the driving force behind my legislation. The National Teacher Act would promote innovative teacher programs, forgive student loans of those who teach in impoverished areas and establish both national and local teacher academies so that all teachers can upgrade their subject knowledge and teaching skills.

I look forward to today's hearing as an opportunity to listen to the views of Rhode Islanders on this legislation. When I return to Washington next week, I will continue this process at a national level with two more hearings. I then plan to send my proposal through the committee process with action on the Senate floor in the near future. What is said today is a critical part of that legislative process, so thank you all for being here, I welcome you and if my statement seemed too long, forgive me but I wanted to get those points on the record for this hearing. This is an important piece of legislation.

There are three panels. The first panel will be Dr. Patricia Lyons, if she would come forward, Associate Professor of Elementary Education of Rhode Island College; Mr. Christopher Kennedy, University of Rhode Island; Ms. Kathleen Mariano, Rhode Island College, Mrs. Carol Beagan with whom I was yesterday from Shea Senior High School.

I would also add that I'm very glad to say that Amanda Broun, Senator Kennedy's aid in education is with us here today and lends more expert knowledge to this hearing. I have invited my colleagues from the Rhode Island delegation. I think some of them may be represented here at a later time.

Welcome Dr. Lyons.

STATEMENTS OF PATRICIA LYONS, ASSOCIATE PROFESSOR, ELEMENTARY EDUCATION, RHODE ISLAND COLLEGE, PROVIDENCE, RI; CHRISTOPHER KENNEDY, UNIVERSITY OF RHODE ISLAND, PROVIDENCE, RI; KATHLEEN MARIANO, RHODE ISLAND COLLEGE, PROVIDENCE, RI; CAROL BEAGAN, SHEA SENIOR HIGH SCHOOL, PAWTUCKET, RI

Welcome Dr. Lyons,

Ms. LYONS. Thank you, Senator Pell. I just looked across and said, I think we're nervous. We don't do this everyday of our lives. We're pleased to be here. I'm very pleased to have the opportunity to——

Senator PELL. Can you hear in the back of the room: I didn't think you could hear. Hold the mike closer and speak louder. Don't be polite, if you can't hear, wave your hand.

Ms. LYONS. We thank you. We thank you for asking us workers from all phases of education to be here and to talk to you about what we think is important about the things we're doing.

I want to paraphrase just a bit from a well known source in teacher education, I think this may be the best of times, it could also be the worst of times; but I wanted to focus on the best.

We've had a bit of spotlight focussed on us in teacher education in the last few years, courtesy of the national reports that have talked about the education of teachers. It isn't necessarily because those of us who teach teachers everyday find ourselves in agreement or disagreement, but we're pleased that there is thought and attention and focus being given again to teacher education.

My second best relates to who the students are in teacher education. The students that I meet in my classrooms everyday and I see in application for the programs and there are two main differences, women continue to be the mainstay of persons in and entering teacher education; but there's a major difference. These are women who are choosing teaching as a career and they can choose anything.

When I first entered teacher education, my classes were full of people whose mother's said, be a teacher, it will always stand by you in case something goes wrong, and some wanted to be there, but many didn't and today the people I know have chosen this over other fields and that makes a different kind of person in terms of being a student and then working—ultimately working with children.

And there's another whole new group of students represented two students away by Kathy Mariano, we call them here alternative students; people who are coming back to school for teacher education having been in another career. They come sometimes 1 year out of college, sometimes 22 years out of college. They have enormously diverse backgrounds, at least as we're meeting them here at Rhode Island College. Kathy was a tour agent. I've had attorneys in my class, a former medical student. You can always get sick in a teacher education class because there are always at least two people who have been in nursing and now for as many reasons as there are people doing this, seeking teacher education. In fact, we see so many here that we hold weekly information sessions to talk with people about what the program will involve. I do one of those sessions once every 4 weeks and I've never seen fewer than 20 persons for the last 2 years. That's a lot of people that are engaging—for whom teacher education is engaging their attention in spite of all the negative elements about teaching that the Senator identified; low esteem of the profession, certainly low salaries.

A third best about teacher education is that which is most directly related to my work and I find most exciting. In the last 25 years, there's been an enormous interest in knowledge about the teaching of teachers and that knowledge will serve to inform us in teacher education as we examine and re-examine our teacher education programs. That's not—that's the least of the well-known bests. You know about teachers entering the field and to a degree and the public may, I think, at large know about the national reports that are focused on teacher education, but this is inside our house that makes the excitement, inside the profession of teacher education. So I'll pause on that for a moment.

I've been a teacher educator for over twenty years and when I first went into this profession, we knew a lot about human growth and development and a lot about and we continue to know and to know more about the teaching of school subjects. We worked hard at that and we use that knowledge to fashion our teacher education programs. But we didn't have a body of knowledge about the education of teachers that could inform us well about our business and what we were to be doing. We will always need to know more, but 25 years now into this business, my colleagues and I, in fact, we're doing it right here at the college, are engaged in a self-study exempting the newer pieces of knowledge that should help us, I think, to do a better job, to work more effectively with our teachers. It's been a slowly developing knowledge base coming from research, coming from the development of theory, coming from analysis of learnings from the world of practice. We have a lot to do. We're working here not to make radical alternatives in our teacher education programs, we feel pretty strongly we have a good teacher education program, but it needs some reshape and redesign and I was thinking this week, two of us were having coffee and we were also building a wish list, things we would like to be—to help us do better in educating our teachers. For example, we had spent an hour over coffee after a planning meeting identifying instructional strategies the three of us were working within our classrooms that would better help engage our students in thinking about their beliefs about teaching and the new practices that we could research. We'd love to have the time to be more thoughtful in designing the way we would use and identify those strategies, find out from our students and from our analysis whether they were effective. We don't have that kind of time. Time is always precious, so are resources. I've never heard anybody say I have too much of it and so, we are here to say to you today, we welcome new legislation in which we may have an opportunity to work, that will help us move further along our road to excellence in teacher education. Thank you.

[The prepared statement of Ms. Lyons follows:]

Prepared Statement of Patricia G. Lyons

Thank you for inviting my comments related to senate Bills 1675 and 1676 with particular concern for the perceptions of a practicing teacher-educator concerning the essential needs in teacher preparation.

The proposed legislation comes at a particularly propitious time in teacher education; a time when the need for new teachers in most sections of the country is clear; a time when it is clear that the profession needs to expand, to attract persons of many cultural backgrounds; a time when those of us in all phases of teacher education, from preservice teachers through senior practitioners in administration, the colleges and universities, and elementary and secondary schools need to seek new and alternative avenues for renewal. Much has been written in the last five years that details and provides supporting evidence of needed change. There are many thoughtful and valuable recommendations for teacher education and teaching emerging from the various national reports.

To schedule this hearing at Rhode Island College and to invite testimony from individuals who through our day-to-day work represent a range of practitioner interests is evidence of your recognition of the value in hearing from many voices. We are particularly pleased that included in this group is a teacher educator, a college faculty member, who has contact with preservice teachers in their preparation programs and with inservice teachers in graduate classrooms and the clinical settings that are an integral component of the teacher preparation programs at Rhode Island College.

In approaching the challenge of reflecting my concerns and those of my colleagues in teacher education, I began by considering those elements that most of us consider essential in the education of teachers.

The task was not easy; teacher education is not an easy task. It used to be, back in the days, and these extended through the first part of this century, when our understanding of children was limited to the perception that children were short adults and their minds/heads were empty and in need of filling. Then, the only challenge for the society at large and educators in particular was to determine with what to fill the heads and to identify effective and efficient mechanisms to accomplish the filling. In short, fill'er up. And teaching was telling; learning remembering.

That era is long gone. Teaching is far more than telling and learning is far more than remembering. We've come to know that children are not empty vessels. Childhood is a distinct period of development with intellectual activity in varying degrees of sophistication present from the first moments of life. Consequently, we also know that through deliberate, skilled and skillful teaching, students can learn not only necessary information, but can and must also learn how to learn. Our society to maintain and improve itself must graduate individuals who are knowledgeable and skillful, able to and willing to make and act on decisions. With these as our educational goals it is critical to have teachers and teaching environments that enable us to meet the goals. And our teachers need to be as their students, rich in information, knowledgeable of continuing ways to learn, skillful in ways of inquiring, testing and assessing value: reflective thinkers.

I began by saying that this is a particularly propitious moment to be considering major legislation to improve teaching. It is. Teacher education has been a slowly developing area. That is not surprising. When compared with other areas of study fewer funds have been available for research and analysis about the education of teachers than in almost any other area. When I first entered this field nearly twenty years ago we knew a great deal about child development and about the teaching of school subjects. In working with teacher preparation we drew from this knowledge and from knowledge about adult learning to aid us in fashioning teacher preparation programs. Generally, preparation programs examine approaches to instruction, the theory that supports the approaches and also provides classroom practice, culminating in the student teaching experience. This last experience is often treated by students, teachers and professors alike more as an apprenticeship than a developmental learning experience.

We are on the threshold of a new era in teacher education, and with support we can cross that threshold and, I believe make enormous gains in improving the quality of preparation programs and ultimately come closer to realizing our goals for teachers and students. Knowledge derived through study, research, and analysis of the world of practice enables the profession to identify with greater precision those significant elements in the knowledge base for teachers and to use that knowledge base to inform us as we examine and revise our teacher preparation programs. That knowledge can also serve to dispel some of the myths that surround, or more accurately permeate, beliefs about the education of teachers. That task won't be easy for these longstanding myths are pervasive: all reflect a belief that teaching is essentially a matter of knowing ~~well what~~ you are teaching and most of the rest will take care of itself. Knowing well what you are teaching is critical. The rest won't take care of itself.

The elements that must be considered in the configuration of teacher education programs are the identification of the components of the knowledge base; the integration of these components; and identification of the means or processes of acquiring the essential knowledge. Most valuable to teacher educators in examining and planning for the future is the work related to the knowledge base sponsored by the American Association of College's of Teacher Education. (1)

The categories within the knowldge base identified in the work of Lee Shulman (2) is particularly instruction. These are: content knowledge; general pedagogical knowledge, with special reference to those broad principles and strategies of classroom managment and organization that appear to transcend subject matter; curriculum knowledge, with particular grasp of the materials and programs that serve as "tools of the trade" for teachers; pedagogical content knowledge, that special amalgam of content and pedagogy that is uniquely the province of teachers, a special form of professional understanding; knowledge of learners and their characteristics; knowledge of educational contexts, ranging from the workings of the group or classroom, the governance and financing of school districts, to the character of communities and cultures; and knowledge of education ends, and values, and their philosophical and historical grounds.

Identification of categories of knowledge provides a quick, but incomplete picture. Still to be considered in program refinement or change is the means of integrating the components of the knowledge base and identification of effective instructional practices in the education of teachers.

The domain of teacher education has increased to a degree that we better know what we need to be about to effect successful teacher education, or at the least we have better tools for thinking about the education of our teachers. But thinking and learning about teaching is hard, and the thing that makes it hardest is that it is not a strange new world - to anyone. Teacher education confronts a problem peculiar to itself and not present in other professional areas such as law, medicine, or chemical engineering. Students entering those professional fields for study enter that strange new world; teachers entering teacher education programs enter a familiar world. They have been in schools all their lives and unconsciously hold beliefs about the conduct of the school business, beliefs that may or may not be consonant with what is best known about teaching and learning. One of teacher education's favorite old saws says, "Teachers tend to teach as they were taught, not as they were taught to teach." Today, we have a better understanding of the reasons for that and consequently, clues as to how to better meet the profession's needs to examine and study. And that is one of our first challenges in teaching - to identify an array of means to cause our preservice teachers to recognize their beliefs about teaching and test them against new learnings.

Assisted by learnings from cognitive psychology concerning progression in the acquisition of learnings in a new field we are provided with greater power as we seek to improve teacher education. We are at a period when we need to invest in program design and experimentation making use of those elements that are known to be valuable, such as clinical experiences, peer group learning, measured observations, and then extend this to incorporate our newer learnings about learning. We also know that the education of teachers requires the participation of not only college and university faculty, but practicing teachers as the clinical instructors. What is not clear is how best to configure that array.

In program redesign we must also take into consideration the new student populations entering teacher education - i.e., older students returning as undergraduates and graduates seeking or changing career paths. Work with these students tells us that they are different types of learners than traditional age undergraduates, with different personal and program needs.

Identification of model teacher education programs has occurred through work such as that of Howey and Zimpher (3) and as we seek to improve these works need study for possible adaptation. More importantly, this should be a time to develop alternatives. For example, we have and continue to take teacher education programs into the field, but too often we don't speak a common language, nor is there any reasons that we should. The classroom teacher is expert in instructing school age children but is not a student of teacher education. Most teacher educators were classroom teachers and we need to identify better and more effective ways of including all in studying teacher education, using our particular backgrounds and experiences. While we must maintain the concept of program portability, moving elements of teacher education away from the college campus it may also be useful to reverse the traffic flow. An experimental program could pair clinical professors and college professors working both in the summer and throughout the academic year in college as well as school settings to design, implement and assess teacher education programs.

Program reshaping is not our only need. No matter how much time we devote to tacher education programs, there will never be enough. We need to learn better ways to use contemporary technology to enhance and make more efficient learnings about teaching. Our progams need some rethinking in order to move information that does not require direct professor/instructor engagement with students work into computer assisted instruction. For example, software programs need to be designed that can engage students in teaching simulations.

There is much more; these ideas only illustrate what we could and wish to be about. One thing remains very clear. Teacher education, if it is to be succaessful, or stand a chance of success, is resource and time intensive for the beginning teacher, and a career long process for all of us.

End Notes

1. Reynolds, Maynard D., Ed. (1989). Knowledge Base for the Beginning Teacher. Oxford: Pergamon Press.
2. Shulman, Lee (1987). "Knowledge and Teaching: Foundations of the New Reform." Harvard Educational Review, 57 (4), 1-20.
3. Howey, K. R. and Zimpher, N. L. (1989). Profiles of Preservice Teacher Education: Inquiring into the Nature of Programs. Albany: SUNY Press.

Senator **Pell**. Thank you very much, Dr. Lyons I assure you and all of our witnesses that your full testimony will appear in the record as you deliver it in person. I'm sorry to ask you all to be brief, but we want to give everybody this morning an opportunity.

Mr. Kennedy.

Mr. **Kennedy**. Good morning.

My name is Christopher Cranston Kennedy. I am 21 years old, and I will graduate from the University of Rhode Island in May with a Bachelor of Science degree in elementary education. I am very pleased that you have asked me to speak before you today. I've had an exciting time these past 4 years, as I've grown from a student to a leader among students. I've experienced much in teacher education, and I am confident when I refer to myself as a professional educator.

I come from a large family of nine children. My mother was widowed shortly before my twin sister and I were born. I have an older brother and two older sisters, as well as three adopted younger sisters and one adopted younger brother. There have also been several foster children in our family's care. Needless to say, I helped out with a lot of diaper-changing, meal-preparing, and babysitting. Growing up without a father was difficult, but my mother provided as much love, discipline, and nurturing as two parents could have.

When I was in high school at North Kingstown, RI, I had entered an advanced-level English program where I was taught the writing process as well as how to write effective essays on subjects ranging from British and American history literature to medieval and contemporary history. My English teachers were so good at teaching how to interpret masterpieces of literature and critiquing them through essay writing that I was inspired to become an English teacher myself.

After giving it more thought, however, I decided that I wanted to work with younger children since I have already had experience with younger children at home.

My first collegiate experience working with children other than my siblings was at a Catholic preschool in Rhode Island in my sophomore year of college. I was an afternoon teaching assistant with eight four and five-year old boys in my charge. I was not aware of the effect I was going to have on those children, but as the months went on, I was greeted daily by a throng of children rushing to me the minute I walked through the door. I was having as much fun as they apparently were and I received positive feedback from the directors and parents as well. I was now sure that I had decided on the right profession for me.

In 1988 as I began to plan class schedules for my final 2 years at the University, I realized that if I were to stick solely to the URI elementary education track, I would not come into direct contact with children until the fall semester of student teaching in my senior year. I thought to myself, one semester of actual teaching and they expect me to be ready to go on my own after graduation.

I was determined not to wait that long before pre-service training. So in the summer of 1988, I sought out a teaching job for the following school year. I was fortunate enough to secure a pre-kindergarten/kindergarten teaching position at a private Montessori school near URI. I taught there in the mornings and took late-afternoon and evening classes at URI. It put a strain on my social life, but it was well worth it. The valuable teaching experience I gained at the Montessori school was something that I would never have received in college alone. Dealing with the children, parents and other staff members as well as attending staff meetings, school board meetings, and professional seminars taught me how to be an effective teacher.

When my student teaching semester rolled around, I can confidently say that I was very prepared &or what lay ahead. I had the thrill of being placed at the same elementary school which I had attended as a child. In an odd d'jais vous sense, I was now teaching alongside some of the very same people who had taught me.

Aside from the thrill of teaching third grade in my former school, it was very enlightening and somewhat disheartening to see the burnout and staff discord at this school. Teachers who had not changed their methods in twenty years were next door to new teachers who had a completely whole-language based classroom. Some were bitter about lack of funds, others were frustrated over lack of leadership, while still others felt that they were teaching in solitude, with no cooperation from other grade-level teachers or feedback from administrators.

My cooperating teacher told me that my idealism and dedication to education is rare today. After several heated discussions at staff meetings, she also told me that I should not voice my feelings and opinions to all the staff members; that I would just be making it more difficult for myself in the long run. That is what the biggest problem seemed to be; teachers were mumbling and grumbling about everything behind people's backs but would not air their views in a staff meeting for fear of some reprimand from the principal or worse, a snub from another teacher. It seems to me that not dealing with the problems is only going to affect their teaching and ultimately, their students learning.

Regardless of staff relations, I had a thoroughly successful student-teaching experience in third grade. My cooperating teacher was implementing the very same methods of whole language instruction that I had learned about in my methods courses at URI. We were conducting writing and publishing workshops with our students, as well as integrating lessons throughout other subjects.

After I graduate is when life really begins. I will have to begin to repay my Perkins and Stafford loans, which total $5,500. I understand that Title I of Senator Pell's Bill S. 1676 would call for the cancellation of repayments of some student loans for teachers, an idea with which I readily agree. There will also be other obstacles to overcome, securing a job, finding a home, starting a family and paying for all of it.

I guess what discourages me most is the lack of support for public school teachers in terms of salaries and increased responsibilities. There is talk of a national teacher certification board and exam that is being developed that would be a step toward establishing the same certification standards for all the States. This would also confer on teachers the much deserved professional status and credibility already enjoyed by such fields as medicine and law.

The best way to show support for teachers would be to provide salaries in line with what other people in similar professionals earn. The average teacher salary in 1988 was $29,567. Contrast that figure with the salaries of middle managers and engineers who are likely to average about $45,000 to $50,000 per year. Even at the entry level, college graduates in many other professions earn much higher salaries than they could in teaching.

In good school systems, however, starting salaries are reasonably competitive with opening salaries in many fields. The problem is the future. For young teachers, the issue is not the bottom salary, it is the top salary. Where can they go? What kind of conceivable expectation of advancement may they have?

I have been told by my family, friends and other peers that as a teacher, I can look forward only to a low ceiling in salary and responsibility. Usually, a teacher's salary will increase only to the degree that it reflects length of employment and so many hours of graduate study. This low salary ceiling is bad enough, but perhaps even worse is the lack of advancement, the lack of sense of career, and the absence of that increased responsibility which usually goes with excellence and demonstrated skill and no, I do not want to go into administration. Business and law, government and industry, even higher education with its system of academic ranks offer such future possibilities; but not the schools.

So why stick with it; why teach? Because I am a good teacher. I love learning and inspiring others to learn. I am a positive male role model. Teaching is the most challenging job imaginable. There is constant change in the classroom and students keep you on your toes. Each student is different, unique. I respect that and respect my students.

In conclusion, people who remain in teaching and show special skills should be rewarded. Education Secretary Cavasoz, in his response to President Bush's $24.6 billion education budget, stressed that schools need a way of restructuring their concerns so that those who have the qualifications and stay in the profession advance to positions of greater responsibility, positions which call for their influence and expertise in matters of curriculum development and administration, and which bring the benefits of prestige and increased salary.

Frances Keppel, former U.S. Commissioner of Education in the Johnson administration once said, the teacher and the classroom are, after all, means to an end and not the end itself. The end of education is learning. If teaching does not achieve that consequence, it is futile. Each new program for reform must continually stand or fall on its proven quality of attainment. Too often a plan for improving the effectiveness of teaching is judged on the basis of its intrinsic appeal, its inner logic, too rarely is it judged in terms of the actual learning of children, the intended product of the educational enterprise. In the necessary revolution of education, the means must become consistent with the end.

Once again, I want to thank the committee for giving me the opportunity to speak.

Senator **Pell**. Thank you very much indeed, Mr. Kennedy.

The next witness is Ms. Kathleen Mariano of Rhode Island College right here. Miss Mariano.

Ms. **Mariano**. Senator Pell and interested parties here today, it's a pleasure to appear before you and have the opportunity to relate my experiences which led me to seek an alternative career in teaching.

Today I appear before you in two capacities, as a student teacher here at Rhode Island College seeking certification and masters as a representative of many nontraditional students.

First, I define a nontraditional student as one who has returned to school to seek teacher certification after many years of working in another profession. We bring—we bring our former experiences to the college and in the classroom, nontraditional students are becoming a significant majority in teacher education today. We are—we have a common—we have in common the fact that we've given the world a shot and developed the philosophy of living and cultivated a philosophy of learning which draws on our life experience and we've decided to channel it to the classroom.

We all have a story, all of us. My story, I received my bachelor of arts from the Providence College in 1978. This dream became a reality because I was the recipient of Pell grants, national defense student loans and Rhode Island State scholarships. I am the first member of my family to receive a baccalaureate degree.

Upon graduation, I worked for an insurance company, then I became a tour guide for an international tour company where I learned to teach in a moving classroom all over the United States and abroad. During this time, I was a teacher and a learner in the most interesting mind boggling social studies class. For 9 years, I guided diverse groups and wore a global pair of glasses.

So why did I leave? Well, I had several experiences with people who are unaware of the reality of their geography. Specifically, in 1987, I was guiding a tour through the South Pacific. We were in Hawaii and boarding an aircraft to Australia. Someone's grandparents were outraged because they did not know that we had to fly an additional nine hours to Australia. So I asked myself, why didn't they know, why were they angry. I reflected and thought about my role as a tour guide. It was no longer rewarding and I realized that I wanted to channel my energies and experience in a direction that would have the most lasting effect, namely among children.

I entered the master in arts in teaching certification program here at Rhode Island College and presently I'm student teaching in Esmond, RI. I'm guiding this class on a trip of learning I hope they won't forget.

To date and this morning as I sit here, my children are building a Sonoran desert landscape, we've celebrated the Chinese New Year and we shared the excitement of the Iditarod with our Alaskan cousins. We're having fun. The children are excited, they're elated and I'm happy and finally fulfilled.

I entered a certification program because I desired the intellectual understanding of how one learns and how to teach.

The pending legislation S. 1675, Excellence In Teaching Act and S. 1676, National Teacher Act of 1989, I believe, address these questions in teacher education. Teacher education must be strengthened and qualified, for we are the front line. We must be kept healthy and strong if we are to achieve excellence in teaching.

The obstacles perspective teachers face being many obstacles; number one, finance; this is a major obstacle. My peers and I staff numerous fast food restaurants and bars because the hours are flexible and the money is good. Eventually, the perspective teacher must become a full-time student, for they are required to student teach. Many nontraditional students do not qualify for financial assistance as it stands today because they have assets, but cannot afford to live without working.

Then there is stress, inadequate day care. I sat in class this past year with a mom student with a baby in arms because the baby sitter canceled. There are not enough seats in required courses. This is a lament on many campuses.

Student teacher ratios; at RIC, we have several supervised clinical experiences prior to student teaching; that is supervised clinical experiences; we need adequate supervision and counsel.

As I said, nontraditional students bring valuable resources to their certified institution parenting job experience and we need the college instructor to assist us in making that connection with former education or former experience to education. Our seminars are becoming classes of 30. How can we engage in dialogue in a lecture hall.

Soon I hope to be a first year teacher and I'm apprehensive to leave the embrace of this college, for I'll need continual guidance to lead me in my development of the mentor programs which strengthen me. Teachers need to confer continually with other teachers.

In conclusion, we teachers have obstacles that must be alleviated. We are the front line and need the support to achieve excellence in teaching.

On behalf of many, many nontraditional students, I express our sincere appreciation for your thoughtful consideration and genuine interest in our obstacles. Thank you.

[The prepared statement of Ms. Mariano follows:]

Prepared Statement of Kathleen S. Mariano

Senator Pell, members of the Subcommittee: It is a pleasure to appear before you and to have the opportunity to relate my experiences which led me to seek an alternative career in teaching. I appear before you today in two capacities-as a student teacher seeking certification and masters at Rhode Island College, and as representative of many non-traditional students.

Foremost, I define a non-traditional student as one who has returned to school to seek teacher certification after many years of working in another profession. As non-traditional students we choose to become educators and take our former experiences with us to the college and then the classroom. Non-traditional students are becoming a significant majority in teacher education.

My Story

I received my B. A. degree from Providence College in 1978. I am the first member of my family to receive a baccalaureate degree. This dream became a reality because I was a recipient of Pell grants, RI State Scholarships, and National Defense Student Loans. I was able to pursue a higher education because of financial assistance. Furthermore my mother and sister received Pell grants and were able to attain their goals and graduated from degree programs as well. In fact my mother became a teacher and now is an assistant professor at Johnson and Wales University. My family is living proof of the American dream that affords individuals the opportunity to better themselves. On behalf of my family I thank this committee and Senator Pell for being instrumental in this change in our lives.

Upon graduation, I worked for an insurance company and then as a guide for an international travel/tourism company for nine years where I learned to " teach" in a moving classroom all over the United States and several countries abroad. I guided many retired teachers, judges, plumbers, bricklayers, moms, dads and numerous school groups to places on the globe they read about and dreamed of seeing. I took care of the details of their holiday as well as inform them as to the historical significance of the area. While traveling with my charges I discovered the cultural diversity within our country and attest to our pluralism as a nation. Yes, we are a cultural mosaic not a melting pot at all. During this time of my life, I learned the importance of HOW one does her job. Honesty, tact, and a sense of humor are attributes that are universally accepted and respected. It gave me great pleasure to be part of hundreds of people's memories. I was emotionally attached and stimulated by this profession that drove me to be the best I could be. Yes there were complaints and I've come to know in my young life that you'll never please everyone. Try hard and they'll be satisfied and hopefully, quiet.

Most of all I enjoyed wearing the hat of a diplomat. In fact, in 1987 I was guiding a tour in the South Pacific and was in Fiji during the time of unrest. I learned to problem solve, think critically and appease numerous personalities.

While guiding abroad I became a teacher/learner in the most interesting mind boggling social studies class. On this same tour I realized that I had to leave this moving classroom. I had someone's grandparents on tour who were outraged because we had to get into another aircraft and fly an additional nine hours to reach our destination Australia. At this time I knew I must channel my energies and experiences in a direction that would have the most lasting effect--namely, among children. I desired the intellectual understanding of HOW one learns and HOW to teach. After nine years I left my "glamorous" job because I recognized the need for teachers who wear a global pair of glasses. I believe my global pair of glasses will make a difference in the cultural mosaic classrooms of our nation and facilitate children in their learning process. I am committed to teaching and feel it is my obilgation to get into a classroom and guide my children on a trip of learning that they will not forget.

Presently, I am a candidate for a Master of Arts in Teaching-Certification at Rhode Island College and student teaching at Anna McCabe School in Esmond, RI. The children that I teach have celebrated Chinese New Year, shared the Iditarod excitement of the Alaskans and created a Sonoran desert landscape. I am thrilled to be a pre-service "director" of this drama which will continually unfold as long as there are children/players. A director needs training and support! Global education facilitates children in their understanding of difference, celebrates friendship and fosters peace.

I believe this will lead to less conflict in our nation's schools.

If the world's knowledge base is doubling every thirty-six months; then the content telling mode of teaching is obsolete. The HOW one learns should be highlighted in teacher education. Teachers are the front line! We must address the education of our teachers who are a diverse group today. They bring to their certifying institution years of experience and parenting that is a valuable resource. These non-traditional teachers need the courses and training in the HOW to channel our education, energy and past experience into a powerful instructional tool in the classroom. Similarly, the children of our classrooms are diverse and often more sophisticated than children of the past. In conclusion, if we aim to qualify the education of our children and achieve excellence; we must address the educational needs of our teachers first. We hold the teacher accountable for a child's learning. I ask who is accountable for the teacher's learning how to teach? The proposed legislation is concerned with excellence-the goal of our educational programs. We need to consider the obstacles that so many non-traditional students who are becoming teachers encounter and will continue to meet in teaching unless something is done to assist them.

I submit this detailed account of my story and beliefs about education which bring you to date as to why and how I entered a certification and masters program. I relate this account for I believe it is indicative of many non-traditional students who seek certification. We gave the world a shot and developed a philosophy of living. Inevitably, we cultivated a philosophy of education which draws on life experience. We are dedicated to this choice to become teachers though we face many obstacles.

OBSTACLES

Finances are one of the obstacles that non-traditional students continually combat in their pursuit of teacher certification. I am very fortunate for this time I had the financial means to go to college. I am the minority amongst my non-traditional student peers. My peers staff numerous fast food restaurants and bars because the hours are flexible and wages are good. I sit in class with single moms who work, care for their children, attend classes and study. Also they are nurses, artists, actresses, an attorney and occasionally a dad. These students juggle the hats of their profession as well as the hat of pre-service teacher. Eventually, the pre-service teacher must become a full time student for it is required that one student teach to become certified. Many non-traditional students are in the middle, for they do not qualify for financial assistance but cannot afford to live without working.

Child care is not available for many of my peers. I've been in class when a mom-student has her baby in arms because the babysitter cancelled. This setting is not unusual. During school vacations there are several children on campus with their moms. This issue must be addressed.

These non-traditional students are emotionally attached, intellectually able and possess an unsatiable desire to learn. We engage in fantastic dialogue and challenge each other to think critically and solve a problem. Teacher education is less prescriptive than other professional programs. Thus we need the assistance of the college instructor to help us make connections with our former experiences to education. This is not happening because our seminars have become classes of thirty students. In addition, at Rhode Island College the pre-service teacher has several supervised clinical experiences prior to student teaching. The student teacher ratio must be maintained so the pre-service teacher has adequate supervision and counsel. There are not enough available seats in required courses. This has become a lament on many campuses and causes conflict among professors, administration and students. As a result, the environment for learning on the college campus becomes unpleasant and uninviting.

I am told that first year teachers struggle to survive and need a mentor. I am eager and hope to obtain a teaching position in the near future. I am apprehensive for I will leave the embrace of the college. I feel I will need continual guidance to aid me in the development of my potential. Learning is not a product but a process that continues long after the exit from the classroom. Teachers need the opportunity to continually refine and confer with other teachers. Lack of a support system can lead to a teacher's demise. The aforementioned obstacles are those that I see. In conclusion, I think it is critical that we alleviate these obstacles in teacher education so as to attract the many fine individuals who would like to hang up their current job hat and enter this noble profession of teaching. While this legislation is pending today, the future teachers and leaders are in classrooms.

Closing

On behalf of non-traditional students, I express our sincere appreciation for your thoughtful consideration and genuine interest in our obstacles to pursue teacher certification. We teachers and children need your support so we can achieve educational excellence and become contributing members of this global society.

Senator **Pell**. Thank you very much Ms. Mariano.

I now come to Mrs. Carol Beagan who I was with yesterday at Shea Senior High School. It was a wonderful experience to be with your students. Miss Beagan.

Ms. **Beagan**. Thank you.

Senator Pell, members of the subcommittee, guests, it is a great pleasure and honor to be here.

Last spring I submitted a proposal to the Dodge Foundation to run a celebration of teaching at my high school, Charles E. Shea High School in Pawtucket, RI.

Shea High School is an inner-city school of a significant minority population. However, our students have very few teachers of minority background to emulate. The current national thrust is aimed at the recruitment of those of minority background into educational fields. Shea High School possesses a wealth of minority students who can be directed into rewarding educational careers.

Seventy college bound juniors and seniors have responded to the invitation for the best and brightest to explore and celebrate the many choices available to those accepting the challenge of becoming educators. Based on a needs assessment survey, 24 workshops have been scheduled for these students on Thursday, February 15, 1990.

Our Celebration 1990 is being funded by the Geraldine Dodge Foundation and is supported by over 40 educators on a voluntary basis. Considerable support and encouragement has been offered by Shea High School principal, James McNaught. Areas being represented include special education, pre-school, day care, early intervention, foreign languages, science, mathematics, social studies, English, bi-lingual education, guidance, administration, physical education and financial assistance. College administrators will also conduct workshops to inform students of expectations and preparations necessary for potential teachers. All workshops allow for informal question and answer sessions. We hope to present a realistic picture and to share both our joys and disappointments in this marvelously fulfilling profession.

Our celebration will start with a breakfast and a short keynote speech by the Rhode Island Teacher of the Year, Len DeAngelis of Middletown High School. Students will be given a schedule of four workshops designed to address their needs and interests. Students and workshop presenters will share an informal lunch with Senator Claiborne Pell, a Senator who has certainly been a friend of education.

We face a critical shortage of teachers in all subject areas. We must address this crisis by encouraging the best and the brightest to enter this profession. Generally speaking, we must reinstate educators to the lofty, respected positions they once held. We must hold on to those dedicated professionals currently manning our educational facilities. Specifically, we must encourage students from all walks of life to consider becoming teachers. We must make the choice attractive. We can offer support to the profession through programs such as Celebration of Teaching, but the thrust must be more widespread on a national level.

The National Teacher Act and the Excellence In Teaching Act can address these needs. Education is in dire need of positive role models for the minority students to emulate. If we are to address the many societal problems facing today's youth, we must provide our young with role models from their own communities and ethnic background. Students must view education as a means to escape poverty and to live productive, happy lives. It is imperative that we encourage and support those presently in education as well as those considering a future in education.

A country is as good as its school. In order to remain competitive on a world basis, the United States government must invest in its noblest resource, education. When education is a primary concern of its people, we all have cause to celebrate.

I'd like to conclude by just sharing a few of the comments that the students wrote on yesterday's Celebration of Teaching. We should have celebrations every year, it brings out the best in all students, the most positive aspect was seeing teachers telling us about their profession and believing in us. The most positive aspect of Celebration was the Senator coming in to speak to us; it showed how much he really cared. It gave us a taste of life as a teacher, the good sides and the bad sides and it encouraged me to go ahead with my teaching plans. I realize now it's a great challenge which I look forward to. It opened new doors in my future, it made me want to become more involved with my community. The communication between the students and teachers with the students being the top priority was the most important aspect. Listening to the teachers enriched—gave me joy and helped me make my decisions. I really learned a lot from this program. I think it should be introduced in every school. So these are just some of the ways that we can address the critical shortage of teachers and continue the recruitment of minorities into education. Thank you.

[The prepared statement of Ms. Beagan follows:]

PREPARED STATEMENT OF CAROL A. BEAGAN

For the last 2 years I was fortunate enough to be invited to the Mary C. Wheeler School in Providence, RI for a "Celebration of Teaching." This day-long seminar was sponsored by the Geraldine Dodge Foundation. Each year I brought 10 students who had indicated an interest in becoming teachers.

The seminar included guest speakers, role playing, and information pertinent to the field of education. The response of my students was so positive that I submitted a proposal to the Dodge Foundation to run a "Celebration" at my high school, Charles E. Shea High School, in Pawtucket, RI. By having a Celebration at Shea, I would be able to include and to excite a larger number of students. Shea High School is an inner-city school with a significant minority population. However, our students have very few teachers of minority background to emulate. The current national thrust is aimed at the recruitment of those of minority background into educational fields. Shea High School possesses a wealth of minority students who could be directed into rewarding educational careers.

Seventy college bound juniors and seniors have responded to the invitation for the "best and brightest" to explore and "Celebrate" the many choices available to those accepting the challenge of becoming educators. Based on a needs assessment survey, 24 workshops have been scheduled for these students on Thursday, Feb. 15, 1990. Our "Celebration 90" is being funded by the Geraldine Dodge Foundation and is supported by over 40 educators on a voluntary basis. Considerable support and encouragement has been offered by Shea High School principal, James McNaught. Areas being represented include Special Education, Pre-school, Day-care, Early Intervention, Foreign Languages, Science, Mathematics, Social Studies, English, Bi-Lingual Education, Guidance, Administration, Physical Education, and Financial Assistance. College administrators will also conduct workshops to inform students of expectations and preparations necessary for potential teachers.

All workshops allow for informal question and answer sessions. We hope to present a realistic picture and to share both our joys and disappointments in this marvelously fulfilling profession. Our Celebration will start with a breakfast and a short keynote speech by the Rhode Island Teacher of the Year, Len DeAngelis of Middletown High School. Students will be given a schedule of four workshops designed to address their needs and interests. Students and workshop presenters will share an informal lunch with Senator Claiborne Pell, a Senator who has certainly been a friend of education. At the concluding workshop I will be able to announce the availability of two $500 scholarships to be awarded to two senior "Celebration" participants. These awards were procured through the work of Joseph Cunha, principal of Jenks Junior High School in Pawtucket. Dr. Victor Pedro and The Seven Castles, a Portuguese community organization, have generously donated these awards in support of our effort to attract minority students into careers in education.

The future of our country is in the hands of our educators. We face a critical shortage of teachers in all subject areas. We must address this crisis by encouraging the "best and brightest" to enter this profession. Generally speaking, we must reinstate educators to the lofty, respected position they once held. We must hold on to those dedicated professionals currently manning our educational facilities. Specifically, we must encourage students from all walks of life to consider becoming teachers. We must make the choice attractive.

We can offer support to the profession through programs such as "Celebration of Teaching," but the thrust must be more wide spread on a national level. Education is in dire need of positive role models for the minority students to emulate. If we are to address the many societal problems facing today's youth we must provide our young with role models from their own communities and ethnic backgrounds. Students must view education as a means to escape poverty and live productive, happy lives. It is imperative that we encourage and support those presently in education, as well as those considering a future in education. A country is as good as its schools. In order to remain competitive on a world basis the United States government must invest in its noblest resource—education. When education is a primary concern of its people, we all have cause to Celebrate.

Senator **Pell**. Thank you very much, Mrs. Beagan, thank you very much for your testimony.

I'd like to ask some questions if I could. Dr. Lyons, there is much discussion today about alternative certification programs, for example, somebody who's very proficient, has knowledge in certain subjects such as science and math, are allowed to teach without going through the certification program; what would be your view on that, Dr. Lyons?

Ms. **Lyons**. Any teacher needs to be an expert and information rich; it's not enough. If we define teaching as telling and learning and as remembering, then that expert has a lot to bring the classroom. However, I think we need and want our teachers to do more than tell children things, and that isn't automatic. The expert in a—in any area has no—I remember well, I own those degrees and initially came into teacher education with a bachelor of arts degree as Kathy is doing; rich in a subject area but with no knowledge of children, no knowledge of engaging children and learning, helping them to move themselves along the lines to becoming proficient, independent thinkers. That requires some teaching and both Chris and Cathy were talking about that and we'd love to see and we are seeing that expert becoming into teacher education, but please not without certification.

Senator **Pell**. What do you think are the qualities and the characteristics that most go into making an outstanding teacher in your view, Dr. Lyons?

Ms. **Lyons**. Curiosity, the caring that both Cathy and Chris I think have talked about through their talks this morning and wanting to know, being open and receptive to finding alternative ways of better helping children to learn and helping themselves to learn.

Senator **PELL**. Thank you. What do you think, Mr. Kennedy and Miss Mariano, were the points that most struck you in your preparation, principal highlights of your teaching preparatory career?

Mr. **KENNEDY**. Well, one of the things that I was sort of discouraged about at the University of Rhode Island was that they offered no type of pre-service introduction to working with children. I know at RIC, they have wonderful programs in the sophomore years where they get to go to the schools and URI didn't offer that as much as RIC did, so I had to go out on my own and find it, ask principals if I could sit in on some classes to get the experience myself because I didn't think I would be ready to go into student teaching without seeing how classrooms are run, how different teachers run their classrooms, and see how many different types of children there are in the classroom to know what to expect.

Senator **PELL**. Thank you. Miss Mariano.

Ms. **MARIANO**. I believe your question was——

Senator **PELL**. What were the highlights that most struck you in your preparation for teaching?

Ms. **MARIANO**. The highlights?

Senator **PELL**. Yes.

Ms. **MARIANO**. Well, for me, as I mentioned in my testimony, what I brought to the college here, my experience, my interest, a highlight was the ability of the staff here, of the instructors to help me channel that; but a highlight is I'm amazed at the hats that a teacher must wear today. As you mentioned in your opening remarks, the children today are not the children that I went to school with and the child that I was. So, the highlight and the people that I have met in teacher education who are simply devoted and emotionally attached to the profession and as Carol mentioned, we need to attract the best and the brightest and the caring and what struck me is this need to drive you to be the best you can be.

Senator **PELL**. Thank you very much.

Miss Beagan, when do you think a young person should start to think about teaching as a career; what might first inspire him or her?

Ms. **BEAGAN**. It's a hard question for me to answer because there's not a day in my life that I didn't know. As a little girl, I lined up everyone on the street and I was always the teacher. I thought I was marrying a lawyer and when he went to Vietnam after taking the SAT's, he sat in a fox hole and wrote a letter to me and said, get the information from RIC, I want to be a teacher and I thought, twenty-three, I mean, you know, you're born with this. So I don't know, I think it's different for every person. For me, I always knew it. For my husband, he was in Vietnam, 23 years old when he decided he wanted to dedicate his life and I think that we are equal but different teachers, we have a different perspective on things.

Senator **PELL**. Where does your husband teach?

Ms. **BEAGAN**. Cranston West.

Senator **PELL**. What subject?

Ms. **BEAGAN**. English, also.

Senator **Pell**. So you're both English teachers?

Ms. **Beagan**. Yes.

Senator **Pell**. For different schools?

Ms. **Beagan**. Very tough on our children. I tell them when they die they will go right to heaven because God will say you spent your hell on earth with these two people.

Senator **Pell**. Thank you very much.

I would State that the record will be kept open for any questions that any of my colleagues care to offer. I just mentioned earlier the Chairman of our full Committee, Senator Kennedy is represented here by Amanda Broun and invitations have gone out to my colleagues, Senator Chafee, Congresswoman Schneider and Congressman Machtley and if they have any questions or their representatives are here, they may submit them for the record.

Thank you very much, panel number one, for being with us and I appreciate you taking this time. Thank you.

Our next panel is Ms. McElroy, teacher of the Lippitt Elementary School in Warwick, Miss Marsha Berger, teacher in Flynn Elementary School, Providence, Mr. John Dwyer, teacher at Portsmouth High and Mr. Press of NEA, RI.

I would add that we have copies of two bills that are under consideration up here with us if anyone wants them, and they are out on the table. One bill is offered by Senator Kennedy, co-sponsored by me and the other bill is authored by me, co-sponsored by Senator Kennedy.

We now turn to panel number two and we turn to Miss McElroy to lead off.

STATEMENTS OF EDWINA McELROY, TEACHER, LIPPITT ELEMENTARY SCHOOL, WARWICK, RI; MARSHA BERGER, DIRECTOR, PROFESSIONAL ISSUES, RHODE ISLAND FEDERATION OF TEACHERS, TEACHER, FLYNN ELEMENTARY SCHOOL, PROVIDENCE, RI; JOHN DWYER, CHAIRMAN, RHODE ISLAND STAFF, SCHOOL STAFF INSTITUTE, TEACHER, PORTSMOUTH, RI; HARVEY PRESS, PRESIDENT, NATIONAL EDUCATION ASSOCIATION, RI

Ms. **McElroy**. Good morning. I'm a fourth and fifth grade teacher at the Lippitt Elementary School in Warwick, RI, and I thank you, Senator, for allowing me to have some input into this very important legislation.

Senator **Pell**. Excuse me, can you hear in the back of the room? I think you better turn the mike closer.

Ms. **McElroy**. What I'm going to do is paraphrase from my statement also and it's prepared and it's written.

My student teachings experience was approximately 7 years ago. I've been teaching for 5 years in the City of Warwick as a permanent teacher and I substituted in the interim and what I found in my first job that was a long-term substitution in a second grade, I found that the hardest thing for me to get used to was there was no correlation between the wonderful college course that I had passed with flying colors and I had aids and it was great and but there was not correlation between that and what was happening in the classroom. I found that my student teaching experience which was supposedly experience that would make that happen for me, was good. It was very good, but it was—it was too brief and that's one of the two problems that I find with the student teaching experience; I believe that it's much too brief and it's an unrealistic situation.

In the student teaching experience, the student teacher is not called upon to make any critical decisions. The cooperating teacher or the classroom teacher who's overseeing her participation or his participation, makes all the decisions and that person—that cooperating classroom teacher is hovering nearby at all times; if the student teacher runs into difficulty, the—that classroom person is there. They can get them out of trouble immediately.

I was actually very fortunate, I had a very good student teaching experience. The person I was with had very good background, she provided as many experiences for me as she could and pointed out the things that would be different when I got out into the quote, unquote real world of teaching and that was when I got into the second grade long-term situation. My memories of that year still can make me very nervous. What happened in that year was I was asked to make a decision that really impacted upon children's futures in a very important way. I was asked to decide by midterm or January of that year which of my second graders would not make it into third grade and I felt that that was a very, very heavy decision for a first-year teacher to have to make at that time. I didn't even know if I knew the children well enough and I was very frightened. I was also very reluctant to admit that I could not make that decision in an expert manner. I had some wonderful colleagues, they were super people, they were very supportive; but I was embarrassed to go to them and say, I can't make this decision, I'm not expert enough to decide which children should and shouldn't go on to the next grade. So, what I did—I also felt that it was an imposition upon these people if I were to ask them to put in several hours to sit down with me and help me piece this puzzle together. So, what I finally did was I did ask a few questions, I read everything I possibly could on the pros and cons of holding—retaining children and I made my decisions much to the chagrin of the principal at that time, I made that decision in April which she thought was rather late; but I—that's all—that time is all characterized by sleepless nights, I would wake up in the middle of the night in fear I was making the wrong decision regarding the children I thought I would hold back and I said, am I looking at the right things and I did—after a while, I started to kind of probe people and ask them what would I look for, but I still didn't want anyone to really know that maybe I couldn't make this decision as an expert and yet I was a first year teacher. In retrospect now I realize that.

I am very interested in Section 303 of the National Teacher Act, because that's the section that talks about the mentor or the intern programs and I know that if that program if there had been a program like that in place, I wouldn't have hesitated to go to somebody and say, would you help me or that person might have been assigned to me and we could have sat down and we could have looked at the children. They would have—that person would have helped me understand what I should look for when I was, you know, observing these children and making this decision.

Last year, I had the opportunity to serve as a cooperating teacher in my classroom for the University of Rhode Island and I tried to enrich that experience dramatically for the young girl who I had. I tried to give her as much experience as I could and I tried to discuss all possible things that could happen when she were out on her own, but still when she left me, I was very fearful for her because I knew as a first-year teacher, I knew what she was going through and still very fresh in my mind.

Also at the beginning of this school year, my principal approached me and asked if I would help a young teacher who was new in the building. She was a first year teacher, so I did and because I'm very interested in mentoring and intern type programs, I structured my own very informal one with her. What I did was I told her that at the outset, the very first day, I told her that there wouldn't be a single question that I would be shocked about, I wouldn't think she was silly, I wouldn't think she were foolish because those are a lot of the things that go through the mind of a first-year teacher and I told her that I would always find time, no matter what was going on, I would find time to address her problems if she had them, and it's worked out very, very well. We have a very nice relationship now and that's a by-product of that, but she's gained a lot of confidence as a teacher and she is a good teacher. She could have been one of the teachers if she had been on her own that—one of the 20 percent that leaves within the first 2 years and that would have been a shame for the—for our educational system because she's an excellent teacher. She cares about the children, she's conscientious and hard working.

So, I guess I would just finish up by saying that I really think that that aspect of the job is very important.

I just wanted to—I'm sorry, I wanted to make a couple of comments on how the mentoring programs I think should function. I think they need to have very strong input from the people who are in the teaching. I think we need to rely on our experience to our veteran teachers to oversee these programs—mentoring programs. I think that that would be very, very important and they should last for maybe a year or two beyond college graduation, but that again, I think should depend on the needs of the teacher who's in the program. Some people within a half year, they're able to pick up the reigns and they can go forward very competently, but at least for them to know there's somebody out there who will answer their questions and who will help them I think is really important. So I thank you very much.

[The prepared statement of Ms. McElroy follows:]

Prepared Statement of Edwina McElroy

I am Edwina McElroy, a teacher at the Lippitt Elementary School in Warwick, Rhode Island and a member of the Warwick Teachers Union which is affiliated with the Rhode Island Federation of Teachers, AFT.

As a fairly recent entrant into the teaching profession, I believe that these bills will be very helpful in effecting some necessary changes in our education system.

There is little correlation between the content and theory learned in college courses and the manifestations and practical applications of that information in the classroom setting. A major goal of the student teaching experience is to enable the college student to understand how that theory and content can be used to teach effectively.

However, there are two problems that prohibit our current student teaching models from achieving this goal. First, the student teaching experience is too brief. Second, the situation is not a realistic one. Generally, a student teacher takes over an entire teaching schedule for a short time at the end of the student teaching experience. The cooperating teacher is always nearby in the event that any major difficulties arise. Further, the student teacher is never called upon to make any major decisions about their students' education and it is the cooperating teacher who sets the pace that the class must follow in order to cover the curriculum.

I was very fortunate, because I had an excellent student teaching experience. However, my first year of teaching was still a very stressful one during which I felt that I did not have the background or experience to make some of the decisions that were demanded of me.

For instance, I was expected to decide, by January of my first year as a teacher, which of my second grade students would need to spend another year at that level. I have memories of sleepless nights and days filled with confusion and fear that I would not make the right decisions. I was reluctant to admit that I could not handle that decision in an expert manner.

My colleagues were good and supportive people but I didn't feel close enough to any one of them to ask for help. I considered it an imposition for me to ask another teacher to help me work out my problem.

Finally, I did ask certain questions of a few people and I began reading everything I could find on the topic of grade retention. My decisions were finally made in April of that year.

I am particularly interested in Section 303 of the National Teachers Act which provides for pilot programs in this area. Intern or mentor programs must have very strong input and directions from senior teachers who are recognized as outstanding teachers and who are in touch with the dynamics of classroom operations. These programs should last for the first year or two of teaching depending upon the individual needs of each new teacher.

In retrospect, if I had had the support of an experienced mentor teacher, as advocated in this bill, I know that my first year of teaching would have been more enjoyable and less frustrating. Also, in my opinion, providing this type of mentor support for new teachers will help to encourage many competent, but frustrated beginning teachers to stay in the profession.

Last year, I had the opportunity to serve as a cooperating teacher. While I tried to give my student teacher as much realistic experience as possible, I worried about what would happen to her when she was left on her own to get through her first year or two as a certified teacher.

This year, I was asked by my principal to help a first year teacher. Because I've read about mentoring programs and I believe in their value, I decided to structure my own private version.

At the outset, I helped her to understand that no question she might ask was too trivial or silly, and that I would always have some time to spend with her when she needed me. I tried to spend some time with her at least once a day during lunch or at the end of the day. She is gaining confidence and becoming an excellent teacher. This kind of support, provided on a formal basis, would help to insure that we don't lose 20% of our new teachers during their first or second year of teaching.

We appreciate your interest in the issue of teacher training and in the other important issues addressed in your bill, Senator Pell, and in the bill introduced by Senator Kennedy. We lock forward to working with you so that we will be able to provide each student with the best possible education.

Senator **Pell**. Thank you very much.

Mrs. Berger from the Flynn School in Providence.

Ms. **Berger**. Thank you, Senator, for having me here this morning. I appreciate the opportunity.

I'm director of Professional Issues for the Rhode Island Federation of Teachers, AFT, and I'm also a full-time elementary teacher in Providence, RI. Additionally, I am a veteran of 27 years in the classroom and I have to say that I feel that this is the most exciting time to be in education next to the exhilaration of your first years of teaching before the idealism gives way to the realism of what we have to face in the classroom.

The Rhode Island Federation of Teachers represents more than eight thousand teachers, health care professionals, school support staff and college faculty and staff throughout the State of Rhode Island. Our membership is especially interested in the legislation before you today.

The legislation would establish the Federal participation in the efforts to address the impending crisis of a potentially devastating teacher shortage. Also addressed would be the need to re-examine, reshape and better equip our education delivery system to be better able to prepare students for changing workforce needs and to participate as informed citizens in the American democratic process.

The Rhode Island Federation of Teachers supports both bills before the Senate Committee on Labor and Human Resources, for they illustrate your awareness of the centrality of teaching to the successful education endeavor and also the need to attract and retain qualified people in the teaching profession.

Demographics tell us that by the early 1990's, 1.3 million teachers will need to be replaced in our school system; that translates into approximately one-half of the current teaching force. Just to keep pace, 23 percent of each college graduating class for the next several years will need to choose teaching as a career. If the new teachers are to be drawn from the top half of the college graduating classes as is most desirable, then 46 percent of those graduating will be needed to replace those leaving, an impossible static.

The data show there has been an increase in teacher recruitment during the 1980's from 4.7 percent in 1982, up to a staggering 8.8 percent in 1988. Obviously, still significantly lower than the needs we'll have. Although this is an increase, it will not meet that anticipated need.

Particularly disturbing to me as a teacher in an urban community is a recent survey indicating that even those who are involved in teacher education programs have indicated that they are not willing to go into an urban community and teach because they feel that the conditions there that would face them would be so difficult that they would choose suburban communities in which to seek a teaching job.

We feel that the proposed tuition subsidies which are recommended in the bills for current undergraduate and for those willing to enter teaching from another profession will help recruitment. And because of the focus on the extra subsidies going to teachers who are willing to teach in the urban community may help to alleviate the particular crisis possible in the urban centers.

The bills before us today also address important needs for teachers and for schools. They are well thought out proposals which recognize the need to intensify recruitment efforts, particularly among minorities to improve pre-service teacher training, provide support for entering professionals in order to retain them and to prepare existing and future personnel to successfully address the ever-increasing needs of an unprecedented and overwhelmingly needy diverse student population.

We support the professional development components of these bills which focus on issues which have a major impact on the overall performance of our education system. As a teacher, I see ever-increasing numbers of children from nontraditional dysfunctional and chemically dependent homes. The needs of these children must be met. I see parents who themselves have educationally disadvantaged backgrounds. These parents are not in a position to provide educationally enriched experiences for their children prior to school. Through early childhood intervention programs and alternative programs during their school years, the needs of these students must be met.

I also see children in increasing numbers coming to school from homes where little or no English is spoken. Not only are these children from newly derived immigrant families, but also from well-established families where English is still not the primary language spoken at home. Often when they enter school, they are enrolled and in bilingual English as second language programs, but soon they are mainstreamed into English speaking classrooms. They need a great deal of help through this transitional period when this command of English may not yet allow them to keep pace with their English speaking classmates. The needs of these students must be met.

There are new initiatives to place handicapped students in the least restrictive environment. This will create new and very different demands on the regular classroom teacher and students. The needs of these mainstreamed students must be met along with the regular students who will have to be in a position to accept the mainstream students among their peers.

The need for the United States to regain its competitive edge in the global economy will impose greater demands for more math and science instruction. Obviously, the needs of our country must be met and (0) top priorities.

As a currently employed teacher, I look into my crystal ball and I have two specters that are raised before me, one is that I cannot adequately and successfully develop and adapt programmatic materials for this collage of needy students that I face daily without professional growth opportunities and followed up with adequate assistance, not just the typical one shot deals. The other is that unless existing pre-service teacher training institutions review and revise their programs to reflect the challenges that their graduates will face upon opening the classroom door, they will have provided individuals to the system who are ill equipped to perform the required tasks. The Rhode Island Federation of Teachers is very supportive of the proposal in Title III of S. 1676 which provides support for model programs and teacher preparation and we are especially interested in model programs which will extend the teacher preparation program to the first year or two of employment. Often referred to as mentor or intern programs, it would seem that using the expertise of senior qualified teachers would help and encourage beginning teachers and improve the retention rate of teachers who presently seem to be hemorrhaging out of the profession after they find out what it's really like.

I also wanted to address a question that you asked the first panel in terms of alternative routes. A concern that we have is that alternative routes need to be explored and may be very appropriate. We are concerned, however, that knowing the subject matter is not the only important issue when you're looking for someone who has a baccalaureate in another area and wishes to go into the teaching profession. It is important to know subject matters panagoshe (sic), which means understanding the subject matter in a way you can break it down and state it and restate it in 20 different ways until the students for whom you're responsible really understand.

A career in teaching is a career in communication and people skills. We cannot take the chance of lowering standards in terms of certification to allow alternate route people to come into the profession unless they have the required skills.

Finally, we are especially grateful for the inclusion of Title II, Class Size Research and Demonstration Project. We believe that the outcome of these research projects will clearly and definitely demonstrate the advantage of reducing class size and the positive affects that smaller classes will have on students learning and teacher performance.

The Rhode Island Federation of Teachers officers and members appreciate your efforts on behalf of education in this bill and during your entire service in the Senate. We look forward to working with you and Senator Kennedy to secure passage of these critically important bills. Thank you.

[The prepared statement of Ms. Berger follows:]

Prepared Statement of Marsha Berger

Mr. Chairman and Members of the committee:

I am Marsha Berger, Director of Professional Issues of the Rhode Island Federation of Teachers, AFT (RIFT) and I am also a full-time elementary school teacher in Providence, Rhode Island and a veteran of 27 years in the classroom.

The RIFT represents more that 8,000 teachers, health care professionals, school support staff, and college faculty and staff throughout the State of Rhode Island. Our membership is especially interested in the legislation before you today. The legislation would establish federal participation in the efforts to address the impending crisis of a potentially devastating teacher shortage. Also addressed, would be the need to re-examine, reshape and better equip our educational delivery system to be better able to prepare students for changing workforce needs and to participate as informed citizens in the American democratic process.

The RIFT supports both bills before the Senate Committee on Labor and Human Resources for they illustrate your awareness of the centrality of teaching to the successful education endeavor and the need to attract and retain qualified people in the teaching profession. Demographics tell us that by the early 1990's 1.3 million teachers will need to be replaced in our school systems. That translates into one-half of the current teaching force. Just to keep pace 23% of each college graduating class for the next several years will need to choose teaching as a career. If the new teachers are to be drawn from the top half of the college graduating classes, as is most desirable, then 46% of those graduating students will be needed to replace those leaving. The data show that there has been an increase in teacher recruitment during the 1980's: in 1982 4.7% of college students indicated that they were heading for a teaching career; in 1985 it rose to 6%; and, in 1988 the figure was 8.8%. Although this is an increase, it does not meet the anticipated need. We feel that the proposed tuition subsidies for current undergraduates and for those wanting to enter teaching from other professions will help recruitment.

The bills before us today address important needs for teachers and for schools. They are well thought-out proposals which recognize the need to intensify recruitment efforts, particularly among minorities; to improve pre-service teacher training; to provide support for entering professionals in order to retain them; and to prepare existing and future personnel to successfully address the ever-increasing needs of an overwhelmingly needy and diverse student population.

We support the professional development components of these bills which focus on issues which have a major impact on the overall performance of our education system. As a teacher I see ever-increasing numbers of children from non-traditional, dysfunctional, and chemically-dependent homes. The needs of these students must be met.

I see parents, who themselves have educationally-disadvantaged backgrounds. These parents are not in a position to provide educationally-enriched experiences for their children prior to school. Through early childhood intervention programs and alternative programs and materials during their school years the needs of these at-risk students must be met.

I see children in increasing numbers come to school from homes where little or no English is spoken. Not only are they from newly-arrived immigrant families, but also from well-established families where English is still not the primary language spoken at home. Often when they enter school, they are enrolled in bilingual or English-as-a-Second-Language (ESL) programs, but soon they are mainstreamed into English-speaking classrooms. They need a great deal of help through this transitional period when their command of English may not yet allow them to keep pace with their English-speaking classmates. The needs of these students must be met.

New initiatives to place handicapped students in the least restrictive environment will create new and very different demands on regular classroom students and teachers. The needs of these mainstreamed students must be met.

The need for the United States to regain its competitive edge in the global economy will impose greater demands for more math and science instruction. The needs of our country must be met.

As a currently-employed teacher I look into my crystal ball and two specters are raised. One is that I cannot adequately and successfully develop and adapt programmatic material for this collage of needy students that I face daily without professional growth opportunities, followed-up with adequate assistance. The other is that unless existing pre-service teacher training institutions review and revise their programs to reflect the challenges that their graduates will face upon opening the classroom door, they will have provided individuals to the system who are ill-equipped to perform the required tasks.

The RIFT is, therefore, very supportive of the proposal in Title III of S.1676 which provides support for model programs in teacher preparation. We are especially interested in model programs which will extend the teacher preparation program to the first year or two of employment. Often referred to as mentor or intern programs, it would seem that using the expertise of senior qualified teachers would help and encourage beginning teachers.

Finally, we are especially grateful for the inclusion of Title II - Class Size Research and Demonstration project in S.1676. We believe that the outcome of these research projects will clearly and definitively demonstrate the advantage of reducing class size and the positive effects smaller classes will have on students' learning and teachers' performance.

The RIFT officers and members appreciate your efforts on behalf of education in this bill and during you entire service in the Senate. We look forward to working with you and Senator Kennedy to secure passage of these critically important bills.

Senator PELL. Thank you very much, Miss Berger.

Now we come to Mr. John Dwyer with whom I remember working a dozen years ago or so on another project.

Mr. DWYER. Good morning, Senator. It's certainly good to see you. I'm not surprised that you've introduced this kind of legislation.

Senator PELL. We both have gotten gray hair.

Mr. DWYER. That's true. I still am not running though with you. However, we are delighted that you have introduced this kind of legislation. We're not surprised, as I said, because if we have a president that considers himself an education president, you've got to set yourself up for some sort of education messiah because of your contributions over the years to the field of education.

Senator PELL. Thank you.

Mr. DWYER. I mean, I've been a teacher in Portsmouth now for 22 years in the social studies department. I have a masters degree and I also have probably 60 credits beyond and the reason I tell you that fascinating information is because I'm prpbably a typical teacher, at least in terms of years of service. Throughout the country, especially in Rhode Island, approximately 60 to 75 percent of us have had between 20 and 30 years of teaching experience. We also are highly educated, very competent and for the most part, still enthusiastic about our job.

I don't come here as an apology for our profession because I think for the most part, we are enthusiastic. We still enjoy going to school everyday and why we seem to have settled into certain ruts and so forth and feel comfortable with what we're doing. We still have curiosity and a concern about many of the problems indicated by two colleagues to the right. We see a need for a vitalization of the teacher educational program offered to this population of people. We feel there is a need to revitalize teachers to the extent that we've pretty well drunk dry the well of information that's available to us, so we're especially delighted in the piece of your package that deals with teacher recruitment because we have to think in 10 years this whole profession is going to turn over nationwide.

We also have to be aware that teacher development programs, not only at the pre-service level, but especially at the level that we're all in now as teachers 20 to 30 years have to deal with and we feel, therefore, your package dealing with the academies and the professional development programs is very important.

Now, one thing that we do think should be emphasized is that the programs that are developed and which are incorporated in your bill involves a heavy input from the teachers, from the people who are going to be receiving these programs. You mentioned the program that we were involved in a few years ago. 12 years ago we established a teacher professional development program. This is a program coordinated between the two teacher organizations as well as all of the other organizations at the State level and our purpose was to provide a test for the idea that if we ask people what they want and then give it to them, they will respond. We feel that that program was very successful. It lasted for 2 years and a number of the programs offered, I don't believe more than two or three of them were not subscribed to. We were well evaluated as you're aware and the program was, we felt, a success.

At the present time, I sit as the Chair of the Rhode Island Staff—School Staff Institute, which is a Rhode Island program that was enacted into legislation by our legislature and also funded by the legislature. Marsha to my right has served as the chair for 4 years priors to that.

Now, an important piece of this program was the whole aspect of going out and asking the people who get the programs to generate the program. So we feel that a very important part of this whole legislation is that it be generated and pursued and pushed by the practitioners, whoever they might be. So, generally it's our feeling that we do have to do something for teachers now in the profession. We realize that local budgets are strained, the State of Rhode Island right now is facing a physical crisis, which means the money to fund many of these programs should come from or could come, we feel, from the Federal level and therefore, we re pleased that you have introduced this kind of legislation. But again, I would caution that in order for these types of programs to be successful, it's our feeling that they should be generated pretty much by the or run and implemented by the people who are receiving whatever programs are generated.

Thank you.

Senator Pell. Thank you very much, indeed, Mr. Dwyer.

Now we come to Mr. Harvey Press, who's the president of NEA. We're glad to hear your testimony.

Mr. Press. Thank you, Senator and his representatives from Senator Kennedy's staff also.

My name is Harvey Press. I'm president of NEA of Rhode Island and here to speak on really one specific piece, which is the Title 11 on the provision which deals with the class size demonstration.

The individuals that have spoken before me have identified how important legislation that both you and Senator Kennedy have introduced as a long-range goal. What I would like to basically identify is, I'd like to regress and talk very simply with, we're dealing with education of children and education of children begins at home.

The family unit, today that family unit is not the same as it was 20 years ago. The stability that a child came to school with when you had the Norman Rockwell family, a mother, a father, probably a brother or sister and maybe a dog or a cat, is no longer in existence. There are pockets of that, but in fact, all over this country, specifically in the urban settings, those children are coming to school in a situation or leaving home in a situation that's totally different than what it was before. We're now coming into schools and we have a whole series of what I'm going to describe as educational junkies that have a lot of great ideas, a lot of smoke, a lot of mirror as to how we can change the program in the United States and I reject that notion and the fact is what we've been doing in education in the last twenty years has been outstanding, that's why most of countries are in competition with us for what we are doing. But the children today do not need the instability of some quick fix, some new program. Let's change the system, let's identify what problems we have and move the whole thing around so that, in fact, you don't end up with large number of students in one class, small numbers in another class, lack of support, you can choose a school district over there, some parents have the ability to do that; we have problem after problem after problem.

The legislation that Senator Kennedy and you have introduced really has done what teachers would basically tell you to do. This is not going to be changed in 1 day it is not going to be changed in 1 year. It is a long-term program that has to be in place. The general legislation deals with those teachers that are in place, those teachers that would come into the system and there's a notion of the best and brightest from the best and brightest and I reject that to some degree, in that it implies the teachers that we have today are not the best and brightest.

What teachers today are working on and dealing with are totally different. Those children coming to classrooms, the problems they're coming with are totally different than anything we've seen in the past twenty years. Our expectation is they will still change, be more difficult in the future years. So the teachers that graduated 20, 25 years ago absolutely need some programs to show them how to work with problems that they never even saw in their lifetime until they walked into the classroom and the children are changing on a daily basis. The impact of technology, the impact of TV, I mean, it's all been documented.

There is one piece in the legislation that I think that deals specifically with children though, and that's that Class Size Demonstration Act. I'm here to basically identify the fact that for the first time, we've had a program in Tennessee identified as the Star Project, and I've left documentation about how that project has working. About a 12 million dollar project, 7,000 students, and it's a longitudinal type program in that it worked across suburban, rural, urban school districts, and then in fact, showed that if you talk about small class sizes, I'm talking about class size around 15 versus what they identified as regular classes, there is a substantial gain by those children that are in classes of around 15 versus those classes that are around 22, 23, 24. There are districts in this State that are identified as G districts, South Kingstown, in which they have kindergarten classes with 26 and 27. Well, the number sounds good until you talk to the teacher and find out how many special needs children are in that class. So it's not 27 regular children, 27 children. That's a kindergarten class, double session, one is 26, the other is 27. Those children are not getting the same education as a class that might have 18 or 19 as they do in Smithfield, East Greenwich. In some cases in kindergarten, many of the classes have 12, 13, 14, same grade. So, the concept of getting an equal education or equal opportunity even in this small State is not there. And we re looking forward to demonstration project as being another step in showing the country that if you want to deal with the stability of the family and you want teachers to become the family away from home, then you can't have 27, 28 and 29 students in a classroom. When you're dealing with children that are five and six and 7 years old when they have a question, you cannot be one of 15 hands that are up there and expect to get quality education to those children. When they have a class of 15 and half the class put their hands up, then you know that you're going to get one-seventh of the time versus one twentieth of the time. That's when true education is going to take place and that's when these programs that they have identified in Tennessee will bear the fruit of that 12 million dollar investment.

We're dealing with children at risk. For every child that's at risk, you end up with a loss. The notion we've been using in Rhode Island, for every thousand children that drop out, it cost the State of Rhode Island 12 million dollars, that's six million dollars in lost wages, and it's 6 million dollars in support services to take care of those children. We do have children having babies. A lot of the issues that we're dealing with today in children at risk are identified even before they come to school. But if we can work with them in small class sizes in kindergarten, one, two and three, we believe that that money will be—that those children will succeed, stay in school, become productive citizens and productive members of the society. We cannot afford not to lower class size. In fact, it absolutely is shown that class size will in fact save money. It shows that children need that and I would end by asking that if there's any opportunity to increase the amount of money in the legislation that deals with the class size reduction, that in fact, we're dealing with children and that's the area that we need to look to and I thank you for that opportunity, Senator.

Senator **Pell**. Thank you very much, indeed. I would thank you, too, for your help in drafting Title II, the Class Size Research Demonstration Project.

Following up one on your thoughts there, pointing out the inequity in the number of students, the difference in the towns and cities in our own State, with the present system that each school committee and each town council can determine what portion of the budget will be spent for education, you can continue to have that disparity and the only resolution of it is moving the government from the local level up to a national level and that from a political viewpoint is not acceptable, so this is a predicament that we're in at this time. My view has always been there should be more in the way of national guidelines, that politically is not a very popular view. I'd be interested in your comments on that sort of thing.

Mr. **Press**. I understand exactly what you're saying and I agree with it and in some cases, you cannot get something done. We have lunch programs because the local community would not do it and the State would not do it, so it's—at one point, we had to go to the Federal Government to identify the fact that children are coming to school that haven't eaten. The Federal Government got involved in that. I think the demonstration aspect is one that will show how it works.

But I would go one step further and I was taking to a reporter on the way in. I basically said, you know, I'd almost like to see the Senator take the whole panel and the people in the audience and walk to the nearest public school or private school, specifically a public school, walk into one of those classes and look at the teacher and say, what can we do to help you teach better and do more for these children and my guess is that the class has 27, 28 children in it. There's absolutely no doubt in my mind what the first response will be. If by chance you happen to walk into a class that had 15, I would tend to expect the following answer to be something to deal with the materials they have, the up-to-date technology that this particular teacher needed, but I know in the school districts around this area, around this State, that 95 percent of the teachers will identify the fact that they have too many children to meet all of their needs.

We talk about least restrictive environment and one piece we never really deal with is the environment these children go into. And in fact, I had one student that has special needs and in a classroom with 27 children with special needs is going to describe a situation where nobody is going to win. In fact, the child with the special needs is going in a lose situation.

To answer your question, you need to go back to the classroom, you need to go into the classroom and actually if you want to find out what's going to help teachers, what's going to help students, ask a teacher, someone in the classroom and you've done that with this panel today.

Senator PELL. Any further comments that Ms. McElroy or Ms. Berger or Mr. Dwyer care to make? Thank you.

What do you think of the idea of alternative teacher certification because I sometimes wonder if it's really necessary to learn educational theories, for example psychology methods in order to be a good teacher. I would just like to go right down the panel, Miss McElroy?

Ms. MCELROY. I think you do need to have some expertise on—about dealing with children in order to come in from an alternate route. Again, as has been said many times this morning, just knowing the content or knowing the subject matter is not enough. I don't know if it has to be, you know, as an undergraduate can come in the old route. I think that needs to be addressed, but I think we cannot compromise the expertise of the people that we're putting in the classroom. I think they have to know how to deal with children and how to get their subject matter across and some of that is necessary.

Senator PELL. Thank you. Ms. Berger.

Ms. BERGER. I'm glad you asked that question. For a long time, teaching was looked upon as an art, the art of teaching. Over the last fifteen years or so, we have finally begun to be recognized as a science as well as an art. The last 15 years or so, as was mentioned I think by one of the first panelists, has brought about very strong knowledge based on research where the researchers did not take a clinical approach by bringing in some students into a clinical, then seeing how they would react with certain programs; but rather the behaviorists, psychologist who went out and did this research by going into classrooms, observing what teachers did, then talking to the teachers afterwards and asking them to explain what they did and why they did it and based on that kind of research, we now have a growing knowledge base. There are many researchers in education who have finally begun to recognize that teaching is probably one of the most complex acts that can be done and some very prestigious people around this country in terms of their research, Barry Rosenshien, David Berlinda, (sic), many other people, now acknowledge that there is such a science to teaching that there really is a fund of knowledge that needs to be learned by someone coming into the profession before they can appropriately and adequately handle that job.

The mentor concept that you have in the bill is one way to teach students who have not gone the traditional route and again, that mentor or induction kind of program, adding a year or two at the beginning of a teacher's career, whether it's a new teacher just coming out of college or a new teacher who has been already in one or more careers.

I serve on the National Advisory Council for Educational Testing Service, which is in the process of developing a successor to the national teacher exam, and one of the most perplexing things that ETS has found in trying to put together this successor to the teacher exam is trying to figure out how they could possibly examine or assess all the skills that are needed by a starting teacher when they first walk into the classroom and it compounds them. They're doing all kinds of job analysis and research to try and come up with that and speaking with some major educational researchers in the country.

The final note, as I mentioned in my original testimony, is I think we're going to need to take alternate routes to get people into the profession because of turnover that will take place. However, as I cautioned in my testimony, it's very important to make sure that in bringing new teachers on, that the standards of certification are not lowered so that people who are coming in are those who are best able to deal with the students that they will be facing. It may be 1 year for a teacher who's new and has come in through alternate route or even the traditional route to spend finding their way through the morrows of what it takes to be a teacher, but if you consider the child, that's 1 year out of the child's life that could be lost while a floundering teacher is trying to find the way to do it and that we have to avoid because they only have 12 years with us. Thank you.

Senator PELL. Thank you. I'm not sure that I agree with you as to whether teaching is a science or an art.

Ms. BERGER. It's both, I would say it's both.

Senator PELL. I think it's art and science. The same way I know—I have also resented the term political science, there's no such—there is not poly. sci., it's political art and it should be thought of as another knowledge coming out of humanities—of the art or humanities. If one thinks about the arts as hands-on learning. I've always thought of teaching as being more of an art.

Ms. BERGER. I would thoroughly agree with you on that.

Senator PELL. Thank you very much. Mr. Dwyer, what were your comments?

Mr. DWYER. Under no circumstances would I support any relaxation of certification requirements. However, I do think that the whole process of certification and the pre-service training should be adjusted and I think if you talk to any teacher who's been in the profession at all, they would tell you that they probably learned more in the profession in the first or second year of teaching than they did at any time before or after and what usually happens is a new teacher is thrown into a situation that is new and in some cases overwhelming, the workload on a new teacher who usually also gets the classes that the other teachers in the department didn't want tends to be extremely difficult and so, what I would do is if I had the ability is to adjust and probably this is not the right place to be saying this sitting in this room, I would adjust the preservice programs to involve more people out in the field who are actually teaching to come into the colleges and work with the people who are running the courses at this level.

When we ran the teachers professional development program, we found that the most productive teams were the theoreticians who were working with the practitioners. They worked in pairs and we found that you had the stimulation of theory and the whole idea coming from the theoretician, but people who left had some material they could use at that time, at that particular time. So we feel that even the preparation at the college level should be adjusted. It's my feeling that a mentoring program or at least a part-time program of new teachers should be introduced so the teacher is not so overwhelmed in the beginning. But generally, if anything, I would like to see us become, at least in terms of our preparation, more of a profession that we would like to be, in that we would have intern programs or mentoring programs or something of this sort where you have veteran teachers who would assist the new teacher coming into the profession and I think that is a requirement in order to strengthen our profession, not to weaken the standards as they exist now.

Senator PELL. Thank you very much. Do you have additional comments?

Mr. PRESS. Yes, Senator. The three individuals to my right have been eloquent and I'll be—there is absolutely a situation in which we're dealing with the quality and certification requirements. The concept of alternate certification implies a number of things and I would need to know what someone was suggesting. There is a requirement to go to law school to be a lawyer.

Senator PELL. Forgive me, that is not universal.

Mr. PRESS. I understand that.

And that's why there's no right or wrong answer to certification of education, but there is a simplistic question that I would ask and that would be those parents that would go before a judge and have a lawyer with alternate certification or go under surgery with a doctor that had alternate training, how secure they would feel with those situations and then ask the same question, would you like to have someone with an alternate certification and just have it as an open ended question, teaching your children. There are skills and very simply, you may stop with a basic situation of knowledge, but there are tremendous skills and things that you need to have to be in front of a classroom and to be working with very young children as well as very bright children and those children that are—have an absolute special need that need to be cared for. This is an art and it is a skill. It is a science, and to just come up with the term, alternate certification, I would caution anyone until we saw what they were actually talking about and how that would improve the educational system for children in this State and across the country.

Senator PELL. Thank you very much. I would certainly enter into the record the study from NEA on class size reduction.

I would return for a moment to the question that bothers me the most, how can teachers be persuaded to stay in teaching over the long hall. I'd be interested in a response from each of you to that. How can a good teacher be persuaded to stay there and not drift away to a better paying profession?

Ms. McElroy. Well, first of all, I think the mentoring programs or the intern programs, that they get puts in place. If they're run well, I think we could encourage young teachers not to leave and we're finding that within our, I believe the first 5 or 6 years that people—50 percent of our teachers are leaving; 20 or more percent, in fact, is in the first two. I think those programs would help cut into that 20 percent and I think we somehow have to find a way to upgrade, maybe upgrade the perception of teachers. I think sometimes teachers who go into the classroom, who are very conscious, who want to do a good job, when they're met with some of the public opinion that says, well, you're not doing this, you re not doing—you're not performing your job, I think that hurts people and I think people think, why do it, why push it.

Another thing that's happening in teaching is the test scores and some of those test scores probably need to be looked at. So I think a lot of teachers are feeling bad with that, how the test scores that are getting public attention don't look good and I think we need to address those issues.

Senator Pell. Ms. Berger.

Ms. Berger. Well, I would begin by saying if you want to keep teachers in the teaching profession rather than losing them to a better paying profession, is to improve the pay of teachers so that they will be comparable and that certainly is one way because if you're a young person, probably newly married with young children, trying to meet mortgage payments and so forth, dedication cannot go very far in getting that mortgage payment and food on the table for your children. But in addition to that, I think something you hit on in your initial statement relative to the esteem that teachers really should be afforded which is not afforded to them now will go a long way. I think the fact that education has been on the forefront for the last five or 6 years has improved to some extent the self-respect and the self-image that teachers have of themselves. And I think that will go a long way. I think proper training and proper—and appropriate kind of experience in the pre-service and within the first couple of years again getting into the concept of mentor induction is very important. Many people leave the profession because they find it so frustrating the first few years and have no one to turn to in terms of trying to straighten out what their problems are.

The other thing that hasn't been mentioned but I think would be appropriate to include is the possibility of broadening the kinds of activities that teachers are involved in without having to leave the classroom and this is something that has come up over and over again. There are many teachers who would not want to go into administration in order to move up in the teaching profession and there are all kinds of plans that would provide opportunity for teachers to broaden their experience, use their education background in ways that are supportive and helpful and beneficiary to education. There are teachers and I'll use myself as an example, who have found that other alternative through involvement with the professional organizations, Rhode Island Federation of Teachers or NEA of Rhode Island, that has given some of us an opportunity to channel some of that excess energy into something that would be beneficiary not only in our classroom, but beyond the classroom and has provided us with the opportunities not to have to leave the classroom but to stay within it and I think all of those things need to be considered as ways to retain teachers.

Senator **Pell**. Thank you very much. Mr. Dwyer?

Mr. **Dwyer**. Marsha I think touched a little bit upon the end of it, money is nice. No teacher goes into it for money. With the skills we have and the abilities we have, we can make lot more money in another professions. However, I do think that our contributions and so forth should be recognized financially. We don't do it for public esteem. We get shattered in the classroom almost on a daily basis, if we have a fragile ego, which of course I don't have anyway. So we don't really—most of us get defensive, we feel we have to defend ourselves if we're attacked at cocktail parties or any place, because generally, we find studies have indicated that our own perception as teachers of our own worth is lower than the general population. So, I take great pride in their appreciation of me anyway.

However, teachers require stimulation, like most people, and after you've been teaching for a number of years, oftentimes the stimulation in the classroom is there because you've got new people to deal with everyday, but you have to really work hard to become stimulated by teenagers. So, what we do is we get involved in other activities, be it organizational activities, or whatever.

To me, the key is coming up, it's in the future, a lot of districts and a lot of States are going to it, it's what's known as giving us piece of the decision-making action. It's always been my contention for anything to work, those people who have—who are involved in making it work have to be involved in making the decision. What's happening to stimulate teachers, you've got to give them a feeling that they have some control over their lives. And it usually happens that laws come down from the stop and we're expected to obey them. What happens and what's happening in many districts and I'm hopeful that it will also happen here in Rhode Island is that more and more schools and districts are being given a chance to make decisions relative to curriculum, relative even to budget and so forth and the Boston teachers included this in one of their contracts and they have some management rights. So, to me the key to keeping teachers stimulated, getting teachers more involved in our profession is to give us some input in the decision making, that way we can deal with keeping teachers where they belong, in front of classes rather than sitting in the front office making decisions that in many case are unrealistic, are not carried out. So to me, the stimulation would come from more activity, at least in terms of decision making.

Senator **Pell**. Thank you very much.

Harvey Press.

Mr. **Press**. Thank you, Senator. It's a pleasure sitting on this panel and I've said it more than once. Mrs. McElroy and Ms. Berger, John, it is a complex question. It cannot be simplistically answered. Salaries for teachers in the State of Rhode Island are identified as a high average, but in fact, when you compare them to other professions, we're in trouble.

A gentleman that spoke at the panel previous to me, in fact, I leaned over to John and said, we should bring him into the organization because his concepts are very clear. I guess basically what happens is someone that graduates from college really enters the profession at a risk, and their first 2 years, they're either going to make it or they're in trouble. As a result of that, you're dealing with a whole situation of mentoring and so forth. So, you're dealing with a student that comes into teaching, has a desire, has some of the basic skills but needs to be helped, cannot be just left out there to farm. As you work through the system, it may be some period of time, but it may be 4 years, 6 years, maybe 10 years, could be fifteen years, there is a period in that professional—in that professional's career where the isolation of our profession becomes a tremendous burden. Going into a classroom, working with those students, working with—whether you're in the secondary schools or the elementary, being away from what's going on in the profession, what's new, is absolutely a demoralizing factor and there are systems that just do not allow teachers to work with other teachers, to get out and talk professional, to get out and share experiences, share ideas and grow.

Everyone on this panel has identified to some aspect that isolation, that inability to go out and share and grow and it's a cost factor to get substitutes or whatever so that those teachers can go out and work together. There is probably the thing that is causing us the biggest problem in the profession right now is a number of and I'm going to use the term negative politicians in the negative that love to bash teachers, there's something wrong with the school system, blame it on the teachers and John has identified the solution to that. The teachers have never been part of the decision-making process and in fact, what we're looking for is to become part of that process. Then if you're going to blame us, you probably have a right to. But in fact, the isolation and the lack of control of our own profession, the lack of control of the decision in the building we work in absolutely is demoralizing to those of us that are in the classroom.

Senator **Pell**. Thank you very much, indeed.

And I wish to submit certainly for the record a copy of a recent survey by Michigan State University showing the expected incomes for education degrees which education is about three-fourths of the way down on the chosen professions.

I would also submit for the record a copy of a recent study by Michigan State University showing expected incomes from an education degree. I think these are pertinent to discussions that we've just had.

[The information referred to follows:]

JANUARY 17, 1990 · EDUCATION WEEK 3

DIMENSIONS

What an Education Degree Is Worth

Students graduating from college this spring with a bachelor's degree in education will find a tightening job market and an average starting salary well below that of many other professions, according to the 19th annual national survey of recruiting trends by Michigan State University.

Employers are expected to hire 2.5 percent fewer new college graduates for elementary- and secondary-school teaching jobs than last year, the survey reports. The average expected salary of $20,650 for new employees with an education degree is a 2.3 percent increase over last year.

Meanwhile, graduates with a degree in chemical engineering are expected to earn the highest salary, at an average of $27,051 a year—a 2.9 percent increase over the starting salary for last year's new hires.

The survey predicts an overall 13.3 decrease in hires of new college graduates, although those who find a job will earn an average of $25,256, or 3.3 percent more than what last year's new hires earned.

Fields expected to have large increases in hiring are public utilities, metals and metal products, and petroleum and allied products.

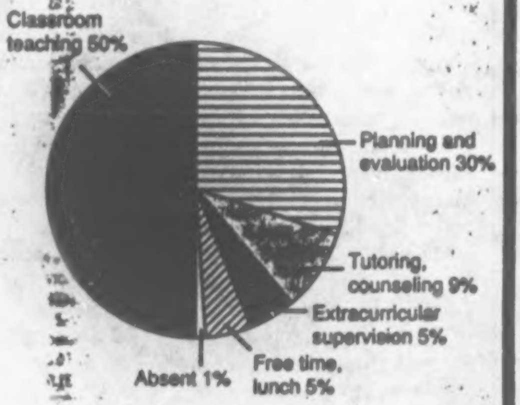
Bachelor's degree	Starting salary	Bachelor's degree	Starting salary
Chemical engineering	$33,380	Agriculture	$22,802
Mechanical engineering	32,256	General business administration	21,845
Electrical engineering	32,107	Social science	21,310
Computer science	31,389	Personnel administration	21,033
Industrial engineering	30,557	Telecommunications	20,880
Physics	28,777	Communications	20,735
Civil engineering	27,707	Education	20,650
Nursing	27,358	Hotel/Restaurant management	[illegible]
Accounting	27,051	Liberal arts	[illegible]
Chemistry	25,938	Advertising	[illegible]
Mathematics	24,968	Retailing	[illegible]
Financial administration	24,359	Natural resources	[illegible]
Marketing / Sales	24,100	Journalism	[illegible]
Geology	24,080	Human ecology/Home economics	[illegible]

DIMENSIONS

The Teacher's Workweek

There are no significant differences in the way public and private elementary- and secondary-school teachers spend their workweeks, according to an analysis conducted for the National Center for Education Statistics.

The average public-school teacher spends 50.4 hours a week on the job, the center reports. About half of that time (25.5 hours) is spent in actual classroom teaching. The balance is spent on planning and evaluation (15.2 hours), extracurricular supervision (2.4 hours), tutoring and counseling (4.4 hours), lunch and free time (2.4 hours), and on sick or personal leave (0.3 hours). Figures for private-school teachers were nearly identical.



Source: National Center for Education Statistics

The data come from a nationwide survey of 7,991 public- and 4,544 private-school teachers conducted between 1984 and 1986.

The researchers found a few differences of note. Private secondary-school teachers, for example, spend about 1.4 hours a week more than their public-school counterparts in student monitoring or other administrative duties.

But these few exceptions aside, the similarities between the two sectors held regardless of differences in school affiliation (religious or otherwise) and size, as well as differences in teacher age, experience, training, gender, and race. The few differences that were found were very small, the center reports.

Based on the analysis, "it is highly unlikely that these small differences could be responsible for the differences in educational outcomes between private and public schools," the report concludes.

The data are contained in "Time Allocation Patterns of Teachers in Public and Private Schools: 1984-86," survey report CS 89-104.

Senator PELL. I thank this panel very much, indeed, for being with us. We'll turn to panel number three, Mr. Timothy Connors, Superintendent of Schools in Woonsocket; Dr. Joyce Duerr, principal of State Street School in Westerly; Mrs. Terri Adelman, President of the Rhode Island Association of School Committees; Mrs. Karen McQuade, National Legislative Chairman of the Rhode Island PTA.

(Brief Recess)

Senator PELL. Thank you very much. We come back to order.

First up is Timothy Connors, Superintendent of Schools, Woonsocket.

STATEMENTS OF TIMOTHY CONNORS, SUPERINTENDENT, WOONSOCKET PUBLIC SCHOOLS, WOONSOCKET, RI; DR. JOYCE DUERR, RHODE ISLAND ASSOCIATION OF SCHOOL PRINCIPALS, WESTERLY, RI; TERRI ADELMAN, PRESIDENT, RHODE ISLAND ASSOCIATION OF SCHOOL COMMITTEES; KAREN MCQUADE, NATIONAL LEGISLATIVE CHAIRMAN, RHODE ISLAND PARENTS TEACHERS ASSOCIATION

Mr. CONNORS. Good morning, Senator Pell. It's a pleasure to be here, an honor to share some time with you talking about the legislation that's proposed by you and Senator Kennedy.

Across this Nation for the past several years, there have been a lot of well-meaning public officials that have made different propositions to impact on the quality of education that will be provided to our children. I think that you and Senator Kennedy and your colleagues are the first to recognize that things such as school choice, change of graduation requirements are all nice and well-meaning, but you really have to look at what takes place in the classroom.

Basically, there are a few things to teaching and learning and the legislation that you have proposed deals directly with those issues and I think the kind of legislation that you proposed could have a significant impact on our school and I might just share with you a scenario that I share with people every opportunity that I get and I think it's important that we be heard at the national level.

My dream is that every teacher would work 240 days a year, 190 of those days would be given over to working with children in the classroom, the remainder of that time would be staff development.

As I listened to Harvey Press, Mr. Dwyer and the others, I think they really speak to the same thing. It would do two things; one, it would increase the salary of teachers; more importantly afford the opportunity for teachers to work with one another in planning and staff and development. So I commend you for looking at that because the key to changing education and having an effective school is to have effective teachers and all of the legislation that you proposed in 1676 and Senator Kennedy's bill talk to that kind of thing.

I have prepared a statement which I would like to read because I think there are some things that you need to hear, keeping in mind that the only way to change the structure of education is to change the attitudes of teachers toward the profession, to recognize that it is a profession, that the teachers should be working throughout the year and in terms of growth and development, we'll take those steps. If the Federal government will play a leadership role in that, then we can change the structure of our education. I just might add, I agree wholeheartedly, teachers need to be part of the decision-making process. In fact, some of our schools took out the principals, give the schools to the teachers so they can do just that.

Let me just share some of these remarks so I don't leave out any things I think are important.

Senator PELL. I would add, any remarks you don't make will be inserted in the record.

Mr. CONNORS. I commend you and your colleagues in the Senate for your leadership in sponsoring the National Teacher Act of 1989.

There are several components of your bill that I believe could make a significant difference in the quality of teaching in our schools, hence, the education of our children. There are some points that your bill overlooks that could make changes in education. Perhaps the best way for me to explain this is to list the order of priority that I see for each section of your bill and the rationale as to why one section should have precedence over another.

Title III, model programs in promising practices and teacher preparation; although I agree with your concern about recruiting teachers in future years, our real need is to retrain our present corps of teachers. In recent years, we have learned a lot about the learning styles of students, yet we have done little to change the teaching styles of teachers. If each teacher had a variety of teaching styles, each child would have an opportunity to be exposed to a teaching strategy that would match his or her style of learning. The failure on our part to make a concentrated effort to alter the way teachers teach accounts for the drop out rate as much as any other single factor that takes place in the classroom.

Therefore, the concept of supporting teacher mentors and teachers evaluating teachers is a step in the right direction. However, I would not look to the universities to provide the leadership in this area. The fact is that some of the worst teaching is done at the university level. Instead, I would look to the expertise found among the teachers in the local communities.

For example, if the Federal government supported an extended school year for teachers, it would enable the local education agencies to implement professional development programs during the summer. Teachers could structure strategies around their curriculums. Some of these teachers could be the mentors or master teachers who would assist in the evaluation of such programs. This approach, instead of going through the colleges and universities, would help to put the decision-making process in the hands of the teachers.

Title II, class size research and demonstration project. I can tell you with a great deal of certainty that if you reduce class sizes and you fail to retrain the present corps of teachers, very little change will take place in the classroom in terms of teaching and learning. In the latter 1960's, we made a significant effort toward individualized instruction. Curriculums were developed and programs for individualization were implemented. However, we forgot to train teachers as to how to individualize instruction and as a result, these programs failed. Lowering class sizes will not bring about individualized instruction; the training of teachers will. Once teachers are trained to be classroom managers, once they are trained to use developmental practices in their classrooms, then the lowering of class sizes will have dramatic results. Don't put the cart before the horse.

One significant caveat on lowering class size for the at-risk and economically deprived students is that most of these children come from our cities which have overcrowded and antiquated schools. Many of the school districts cannot lower their class sizes because they do not have the facilities to house additional classrooms. Woonsocket is a case in point. If I had the dollars to hire ten additional teachers for the purpose of lowering class sizes, I would be unable to do so because I do not have the classroom space available for additional classes.

A few years ago, I wrote to Senator Chafee and you indicating that many of our city's schools need to be replaced because they are antiquated. In addition, due to the recent baby boom and the influx of non-English speaking students, our elementary schools are overcrowded. This bulging of our older schools must be addressed in communities across the country if we wish to provide an effective learning environment for teachers and students. Without adequate facilities, many of the schools that could not benefit from smaller class sizes will not be able to participate in such a program without a building program.

Title X, loan forgiveness for teachers; this concept was certainly beneficial in the sixties and would assist in encouraging individuals to enter the teaching profession.

Title IV, new careers for teachers; this concept to attract minority candidates from other careers into teaching certainly is worthy of pursuit. We should expand this to include bilingual persons who can assist in the teaching of our non-English speaking children.

Senator, teacher training at any level is the key to changing the structure of education today. Most of the educational initiatives, such as raising graduation requirements, choice and national report cards have been window dressings. The real issue is providing sufficient funds to retrain our present teachers, to encourage the best of our youth to enter the teaching profession and to insure that teachers take up the challenge of policing the professional development of their vocation.

You appear to recognize this need in much of what is proposed in your National Teacher Act. However, please don't stop at the doorway to change. Each of the sections of your legislation outlines a process for providing seed money, that is, funding for a limited time period. This approach will result in raising the expectations of the educational community only to slam the door shut by shifting the responsibility for funding to the cities and towns of this country.

You're correct in stating that the future rests upon the teachers of today; but we must insure that our teachers are prepared with a wide range of pedagogical skills to meet all the needs of today's youth.

I appreciate that your time. I think that in summarizing, I believe this can make a significant impact in your legislation, Senator Kennedy's and is a first that addresses the real issue of changing the structure of our schools by helping teachers to get training and professional development that they need so that those two things, teaching and learning, can take place. Thank you.

[The prepared statement of Mr. Connors follows:]

Prepared Statement of Timothy P. Connors

Dear Senator Pell:

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There are several components of your bill that I believe could make a significant difference in the quality of teaching in our schools, hence the education of our children. There are some points that your bill overlooks that could make changes in education. Perhaps the best way for me to explain this is to list the order of priority that I see for each section of your bill, and the rationale as to why one section should have precedence over another.

Title III - Model Programs in Promising Practices and Teacher Preparation (replace with training)

Although I agree with your concern about recruiting teachers in future years, our real need is to retrain our present corps of teachers. In recent years, we have learned a lot about the learning styles of students, yet, we have done little to change the teaching styles of teachers. If each teacher had a variety of teaching styles, each child would have an opportunity to be exposed to a teaching strategy that would match his/her style of learning. The failure on our part to make a concentrated effort to alter the way teachers teach accounts for the drop-out rate, as much as any other single factor that takes place in the classroom.

Therefore, the concept of supporting teacher mentors and teachers evaluating teachers is a step in the right direction. However, I would not look to the universities to provide the leadership in this area. The fact is that some of the worst teaching is done at the university level. Instead, I would look to the expertise found among the teachers in the local communities.

For example, if the Federal Government supported an extended school year for teachers, it would enable the Local Education Agencies (LEAs) to implement professional development programs during the summer. Teachers could structure strategies around their curriculums. Some of these teachers could be the mentors, or master teachers, who would assist in the evaluation of such programs. This approach, instead of going through the colleges and universities, would help to put the decision-making process in the hands of the teachers.

Title I Class Size Research and Demonstration Project

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Title X - Loan Forgiveness for Teachers

This concept was certainly beneficial in the Sixties and would assist in encouraging individuals to enter the teaching profession.

Title IV - New Careers for Teachers

This concept to attract minority candidates from other careers into teaching certainly is worthy of pursuit. We should expand this to include bilingual persons who can assist in the teaching of our non-English speaking children.

Senator, teacher-training at any level is the key to changing the structure of education today. Most of the educational initiatives, such as raising graduation requirements, Choice, and national report cards have been window dressings. The real issue is providing sufficient funds to retrain our present teachers, to encourage the best of our youth to enter the teaching profession, and to insure that teachers take up the challenge of policing the professional development of their vocation.

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You're correct in stating that the "future rests upon the teachers of today." But we must insure that our teachers are prepared with a wide range of pedagogical skills to meet all the needs of today's youth.

The peace that, hopefully, will come about because of the happenings in Eastern Europe will cause dividends that could be invested in equal educational opportunities for all students. This means providing the best teachers that we possibly can. Your legislation is a start, but it must be on-going and inclusive for the veteran teachers, as well as the beginning teachers.

Senator **Pell**. Thank you very much, indeed.

We now come to Dr. Duerr. I apologize for the misspelling of the name.

Dr. **Duerr**. Actually, when I saw the name card set in front of me, it made me feel very much at home. I'll get into that and I'll explain that comment.

Senator Pell, you certainly are to be commended for your continued commitment to education. It is my privilege to sit here as a representative of the Rhode Island Association of School Principals and to give some feedback from my experiences as a principal because those certainly don't exclude my experience as a classroom teacher with 30 years in a career in education, the last 13 as a building principal, but much of it as a teacher.

I'm a principal of a primary level building with kindergarten through third grade students and those in Rhode Island who are familiar with the literacy legislation and Drop-Out Prevention Act and the ramifications for that in the classroom are very familiar with the concept of inventive spelling and many of my children spell my name this way. The correct spelling is on the roster of the panelists.

When I first looked at this legislation last week, the first section on loan forgiveness for teachers kind of jumped right out at me. I'm in a situation now I have four sons who are diligently paying back their student loans, and these panelists have already alluded to the demand on families just getting established of paying back student loans while they're balancing the mortgage payments and the grocery bill. And I think this perhaps more than any other one thing can provide an incentive for people to go into teaching as a career. The lower salaries of teachers is acknowledged by everyone except maybe for some of the taxpayers, but this certainly can be an incentive for people and I think this is a valuable component of this legislation. As a parents, as an educator and as a concerned citizen, I am happy to endorse that concept of this legislation.

The whole area of class size is certainly an area that's getting a lot of focus of attention. I sat on committees with Marsha Berger and Harvey Press in the past and we've discussed this a lot. Much of the attention focus is on the needs, particularly in the urban areas. I represent the other end of the State both geographically and economically, but interestingly, this week I implemented in my building a breakfast program, it's new for Westerly. It's an old hat kind of thing for many districts, I'm well aware. Forty percent of my students are coming in and eating breakfast in Westerly. What's more interesting to me is the feedback I'm getting from classroom teachers who are saying, you know, she has stayed in her seat all morning, this youngster is doing what he's supposed to be doing in school and is able to focus on school and I've read lots of data on the value of breakfast and have seen it evidenced this week. But my concern about the whole area of class size and I'm pleased with this legislation because it calls for studying for this, and I recognize the concerns that my colleague here has alluded to as far as space goes, but the other thing that concerns me is that we need to look at what happens in the classroom when we reduce that class size. We have a lot of research that talks about effective teaching and unless we have changes in the teaching strategies in that smaller class size, I think we're going to see little change in students' performance. We talk about class sizes now of 27 and 28 as being very large. People who started in my era had classes of 37 and 38, but I will be the first one to acknowledge the fact that the students who walk in the door of State Street School in Westerly and we didn't walk in today because we have a water contamination problem in Westerly and we're on vacation a day early, but the needs of these students are far, far different from the needs of the students who walked into my last classroom as a beginning teacher over 30 years ago. We need to look at the research and I'm anxious to look at this summary of the research on the Star Project; that's new to me. So, I'm pleased to see that research concept emphasized.

The model programs in teacher preparation was another exciting aspect for me. In my years as a principal, I've had a goodly number of student teachers work in my building. I've had the opportunity to sit with faculty members, both here and at the State university, and discuss my concerns about the need for pre-student teacher, student contact and I think that that's of critical importance. I'm excited because right now, I have six students both some from this college from some from the university who are coming into my building as a—for experience that precedes student teaching in classroom observation, tutorial opportunities. They're going to benefit, my students are going to benefit, my teachers are excited about being a part of this.

For many years I've been an advocate of a teacher mentor kind of concept. Last year, I had two new teachers, new to the primary grades in my building and I was fortunate in having an experienced, outstanding classroom teacher at the same grade level who agreed to serve in a mentor relationship to these new teachers. One of these teachers was in her first year of teaching. She had been around a while and had some varied experiences in alternate careers not because she was trained that way, she was trained to teach and then spent 10 years waiting to get a job. The other one came to the primary grades from the secondary level having been in having been an industrial arts teacher and in that's the kind of a field that students aren't enrolling in too much, so she came back and got her masters degree and certification for elementary. Both of those teachers teaching in a new experience have come back to me time and again saying how helpful it was to know that they could go to this other teacher with their questions, with their—and get support. That's—I think an essential part of a good teacher training program is to have that mentor opportunity. Look at the research in early childhood development is something that's very close to my heart and I'm pleased to see an emphasis looking at this because both the neophyte and the veteran teachers need to be aware of what's happening in the area of early childhood education and the impact that must have on our classroom instructional programs.

The emphasis on involving teachers in the decision-making process is something that we're looking at and we have a number of teachers involved in in Westerly. Some of the comments from the earlier panel about keeping people interested and retaining our good teachers, we're finding that teachers are gaining a new enthusiasm because they are being listened to. We are fortunate in our community to have a strong base of support for in service training for staff development. Westerly has been recognized as an NEA laboratory sight and our community has given a strong commitment to this. What pleases me is when I sit with my classroom teachers and they say, I'm excited about teaching again because I'm able to do something different, but that in-service training has to be as someone said earlier, more than a one-shot deal. It's the ongoing process. There's importance of strong teacher training, both at the pre-service level and in-service level and is certainly essential not only to improve the educational program but also to retain the competent teachers that we have in the field. The academies are a way to do this, too. I think the opportunities to interest minority people in pursuing educational careers, this hasn't been hit upon too much, but and that is not something I see in my district due to the demographics of the community, but certainly, the incentive for minority people who are in noncertifying positions in our school system to have the opportunities to upgrade their skills and get that teacher training program and become certified teachers can be a strong impetus of encouragement for these people.

It's a pleasure for me to have the opportunity to endorse these. There's many things in here that I—the timing is good, there are things that I've seen over the years as important aspects of teacher training and retaining good teachers and I'm pleased on behalf of the Rhode Island Association of School Principals to lend our support to this legislation.

[The prepared statement of Dr. Duerr follows:]

Prepared Statement of Joyce B. Duerr

Rhode Island Senator Claiborne Pell is to be commended for his continued commitment to education. It is indeed a privilege to represent the Rhode Island Association of School Principals in testifying on behalf of Senator Pell's bill S1676, the National Teacher Act of 1989, and its companion bill S1675, the Excellence in Teaching Act, as introduced by Senator Kennedy.

Title I: LOAN FORGIVENESS FOR TEACHERS

Of major concern today are the increasing costs of higher education. These rising costs often preclude many worthy students from pursuing a college degree. Students who do persevere, often with the assistance of student loans, find themselves burdened with student loan repayments at the very time they are attempting to establish households and gain a foothold in their professional careers. These burdens of loan repayments, housing expenses, and rising costs of living often deter competent individuals from entering the field of education where, typically, starting salaries are below those offered by other professions.

Title I of Senate Bill # 1676 can be a strong incentive for students to pursue a career in education. This incentive may especially motivate minority students. As a parent, as an educator, and as a concerned citizen, I highly endorse this aspect of the bill.

Title II:CLASS SIZE RESEARCH & DEMONSTRATION PROJECT

There is significant discussion in educational circles today about the impact of class size on student achievement. Class size clauses are appearing in teacher contracts with increasing frequency.

The 1991 National Governor's Report encouraged the reduction of class sizes as a move toward improving education. The Rhode Island Literacy and Dropout Prevention Act addresses the issue of class size and encourages the reduction of class size in the primary grades to a maximum of fifteen students. Legislation is currently being introduced in the Rhode Island Assembly that would support the reduction of class size.

At the present time the research data on the impact of class size on student achievement is limited. Some of it would suggest that a reduction in class size, in and of itself, will do little to improve student performance. It is necessary, in my opinion, that a reduction in class size be accompanied by a change in instructional approaches. If the same teaching strategies used in a class of twenty-five or more or used in the class of limited size, I would hypothesize that there would be little significant change in the student performance.

There has been considerable research conducted in the area of effective teaching. If what we know about effective teaching is combined with a reduction in class size, we may well be on our way to showing significant gains in student performance

General impressions among educators, especially at the building level, are that there are many benefits to be derived from a reduction in class size. These benefits needs to be substantiated. There is a definite need for further research in this area. I endorse Title II of this bill.

Title III: MODEL PROGRAMS IN TEACHER PREPARATION AND PROMISING PRACTICES

The components of this title comprise some essential principles of teacher preparation. A partnership between schools and universities can be a mutually beneficial marriage. In my experience as a principal who has frequently had student teachers assigned to my building, I have observed a definite need for college students to gain more exposure to the school setting prior to their student teaching experiences. I am most pleased this year to have several college students observing in classrooms and providing individual tutorial assistance. These experiences can greatly enhance the skills brought to the classroom by the student teacher.

I also strongly support the concept of mentoring Beginning teachers, and teachers changing subject areas or grade levels, can greatly benefit from the mentoring support of master teachers.

Neophyte and veteran teachers alike need an increased awareness of recent research in early childhood development. This research can have a major impact on many practices currently in place in our primary grades. As a principal with considerable experience in the early childhood area, I am particularly cognizant of this need.

Programs designed to increase teacher involvement in decision-making are being developed. This new responsibility for teachers should be reflected in teacher preservice and inservice training programs. There is need for further study in this area. If properly implemented, this concept holds a potential to positively impact the educational scene.

Title III is an important aspect of this bill. It is through strong teacher training programs, both at the preservice and inservice levels, that we can most effectively improve our educational programs It is without reservation that I endorse this aspect of Senate bill # 1676.

Title IV: NEW CAREERS FOR TEACHERS

This portion of the bill, designed to attract minority candidates who are in school support or paraprofessinal positions, into teaching careers should provide a strong impetus of encouragement.

Title V: NATIONAL TEACHER ACADEMIES
Title VI: CONGRESSIONAL DISTRICT TEACHER ACADEMIES

These aspects of the bill provide opportunities for on-going staff development programs while also giving recognition to master teachers. These are vital components of any program designed to develop and retain outstanding educators for our schools today.

Senate Bill 1675, Excellence in Teaching Act, closely parallels bill 1676. A particular strength of this bill in the inclusion of an induction program as part of the Teacher Corps. Working with a mentor teacher during the initial year of teaching is a concept that I have long supported.

The recognition of master teachers is a viable way to acknowledge the contributions of outstanding personnel. Using their expertise to assist in the development of inservice training activities can be a beneficial experience for all those involved.

Other concepts encompassed in this bill emphasize the enhancement of teachers serving in specialized areas. The proposed programs to accomplish this bear study and consideration.

The development of model or demonstration programs for school based management and shared decisionmaking would provide the basis for the study and research of these management models. With the current interest in this area, it is most appropriate that the effectiveness of these models be assessed. The provisions of these bills would provide incentives for school districts to experiment with school based management/shared decisionmaking projects.

SUMMARY

Senate Bills 1675 and 1676 provide the framework to support strong preservice and inservice programs designed to encourage more individuals, including minorities, to pursue education as a career goal. The provisions for loan forgiveness, grants, teacher academies, research, and the development and support of model programs all combine to present a comprehensive plan to strengthen our professional resources in the educational arena.

Senator **Pell**. Thank you very much, indeed, Ms. Duerr—Dr. Duerr.

Mrs. Adelman.

Mrs. **Adelman**. Thank you. The Rhode Island Association of School Committees wants to thank you, Senator Pell, for your interest, concern, support for education and to acknowledge the achievements of your many years of effort on behalf of the young.

Addressing the issue of numbers and quality of teachers is a vital component of all the educational improvement efforts underway. School committees are in a frustrating position of carrying out the educational wishes of their local communities. This is frustrating because we hear the complaints from parents about teachers and programs, from administrators about having to choose between program teachers, materials and buildings and from the taxpayers about the high cost of education.

The Association of School Committees feels that after schools are restructured, curriculums are upgraded and new teaching styles developed, ultimately our children's educational experience are still determined by the teacher—how the teacher incorporates these new measures in the classroom. When the doors close on a classroom, parents and the community must be assured that what has been planned to take place in reality does take place.

Teacher preparation mentor programs must result in high caliber teaches, thoroughly prepared in academics, new methods of curriculum delivery, ethnic awareness and communication skills. Local school districts must set high teaching standards and expectations and be able to choose the best and qualified applicants. They must also be able to see the standards are met by continually evaluating teachers and providing resources to help teachers meet them. Tenure laws and collective bargaining agreements make performance monitoring difficult at best and virtually nonexistent at worst. There is little incentive for some teachers to improve since they are protected by law and contract.

In the area of increasing the numbers of people interested in teaching, salary incentives must be competitive, working conditions need to be stimulating and avenues must be in place to allow entering teachers to enter the profession in a variety of ways.

The loan forgiveness will help alleviate possible teacher shortages.

Reducing class size is a much discussed issue. In the demonstration project, thorough data collection and evaluation is crucial. It must be clear that if there is improved learning, the change in student class size reduction not because of other changes in program. Reducing class size increases building cost. Without adequate funds to resolve these needs, the demonstration project will show results that could—cannot be readily transferred to other districts.

Establishing model programs in teacher preparation and promising practices has good aspects. School systems like businesses have wanted to fine tune incoming teachers, not to completely retrain them. Working in partnership with higher education will only help if universities listen to school system's needs.

We strongly support New Careers for teachers and minority candidates as long as standards for hiring are not compromised and that the pilot programs keep in mind that the ultimate goal is still to improve the educational experience of our students.

Thank you.

[The prepared statement of Mrs. Adelman follows:]

Prepared Statement of Terri Adelman

The Rhode Island Association of School Committees wants to thank Senator Pell for his interest, concern, and support for education: and to acknowledge the achievements of his many years of effort on behalf of the young.

These two pieces of legislation again show that he is continually attempting to improve the education our students receive. Addressing the issue of numbers and quality of teachers is a vital component of all the educational improvement efforts underway.

The Association feels that after schools are restructured, school-based management is implemented, curriculums are upgraded and new teaching styles developed, ultimately our children's educational experience is still determined by how the teacher incorporates these new measures in the classroom.

Teacher preparation must result in high caliber teachers, thoroughly prepared in academics, new methods of curriculum delivery, ethnic awareness, and communication skills. Local school districts must set high teaching standards and expectations, and be able to choose the best qualified applicants. They must also be able to see that these standards are met by continually evaluating teachers and providing resources to help teachers meet them. Tenure laws and collective bargaining agreements make performance monitoring difficult at best, and virtually no-existent at worst. There is little incentive for some teachers to improve since they are protected by law and contract which requires prove of incompetency for dismissal. The Rhode Island Association of School Committees (RIASC) wants to see schools have greater recourse prior to teachers becoming incompetent. If all of the above does not take place, all other efforts to improve education will be in vain. When the door closes on a classroom, parents and the community must be assured that what has been planned to take place, in reality, does take place.

In the area of increasing the numbers of people interested in teaching, salary incentives must be competitive enough to attract the "best, brightest and most caring people"; working conditions need to be stimulating; and avenues must be in place to allow one to enter the teaching profession in a variety of ways. Therefore, legislation like S. 1675 and S. 1676 which focus on increasing the numbers and caliber of teachers are to be applauded and supported.

S. 1676 has more positive components. It addresses the teaching profession as a whole instead of dividing teachers into categories. Also, S. 1676 stipulates the amounts that can be expended for administrative costs and it allows local education agencies to make direct requests for funds.

In S. 1676 the loan forgiveness will help alleviate possible teacher shortages especially for rural districts that may have more difficulty attracting teachers. The special ruling will help if a fifth year education course becomes necessary for certification.

Reducing class size is a much discussed issue. Primarily because it requires large funding for the increase in staff. In the demonstration project thorough data collection and evaluation is crucial. It must be clear that if there is improved learning, that change is due to class size reduction not because of other changes in program. Reducing class size not only increases personnel costs, but also building costs, if no other scheduling solutions are available. Without adequate funds to resolve these needs, the demonstration project will show results that can not be readily transferred to other districts.

Establishing model programs in teacher preparation and promising practices has good aspects. School systems, like businesses, have wanted to fine tune incoming teachers not to completely train them. Working in partnership with higher education will help if universities listen to what local schools need. The mentor component is excellent because it gives local schools greater ability to help new teachers.

RIASC supports teacher involvement in some policy and governance decisions and feels most school systems do that. However, until it is required that all factions making decisions have the responsibility of accountability the team in some areas must be limited. Otherwise the parents and community have no recourse in making changes. School Committees may not be re-elected and superintendents may be fired if they do not perform as is desired. That is not the case with teachers.

New careers for teachers and minority candidates we can support as long as standards for hiring are not compromised, and that the pilot program keeps in mind that the ultimate goal is still to improve the educational experience of our students; not to increase minority teachers. Some of the programs for minorities should really be offered to all teachers.

The National Academies are a good idea. RIASC hopes that although they are focused on specific subject areas that time is allocated during developing methods of instruction to integrating that subject with others. RIASC does question why the Congressional academies are an add-on. Couldn't the academy's function be a collaboration of local schools and universities. Thereby, the best teachers are not totally pulled out of the classroom but their time used differently. Also, are the academies a duplication of the services that the Department of Education should be providing.

S. 1675 addresses many of the same areas. The teacher corpse is an effort RIASC can support. RIASC was encouraged to see that evaluation will be used in the selection process for the senior teacher corps.

In Title VI - Teachers of Children with Handicaps Enhancement, RIASC assumes that using the term "Mainstream" is synonymous with the LRE and that these same funds can be used for both.

RIASC agrees that School Based Management/Shared Decision can be tried further to see if schools are more effective. Again the issue of responsibility and accountability must be addressed and clarified.

Senator PELL. Thank you very much, indeed, Mrs. Adelman. Your complete statement will be inserted in the record as that of all our witnesses, as read.

We now come to Mrs. McQuade, National Legislative Chairman of the Rhode Island PTA, Parents Teachers Association.

Mrs. MCQUADE. Thank you, Senator Pell. I'd like to begin by thanking you for your long-time support of PTA and inviting us to participate in this important forum.

I am grateful for the opportunity to represent the Rhode Island Congress of Parents and Teachers, 15,500 members, in supporting the Excellence in Teaching Act and National Teaching Act of 1989.

In regards to S. 1675, Rhode Island PTA is in full agreement with the Bill's Statement of Purpose, recognizing that the success of educational reforms required for school improvement are dependent upon the Nation's abilities to attract and employ caring, competent and skilled teachers.

Rhode Island PTA recognizes and applauds the accomplishments of many Rhode Island school districts in regards to staff development and in-service training programs. We'd like to note the merits of Title II, professional development academies provisions with a special interest in parenting education. Our concern lies with the sense of isolation and feeling of confusion that many parents experience today as a direct result of hard economic realities, changing family structure, and cultural differences in parenting techniques. Many are in dire need of such guidance and support as this would provide.

We would like to echo the National PTA's concern regarding the decrease in the number of minorities who are entering college and the rising number of those in college who are not choosing teaching as a career. This reality is not only a detriment to minority students, but is a great loss to the entire student population whose educational environment should reflect the multicultural reality of the world they live in by their parents' side and the one they will enter as independent citizens. Title III of this bill speaks well to this issue.

In keeping with PTA's 93- year old commitment to two basic beliefs, that is children are the future and that everyone needs to care about all children, we believe that Title IV, bilingual teacher enhancement and Title VI, education of the handicapped teacher enhancement will help to ease the growing problems of language minority students and students with special needs here in Rhode Island as well as the rest of the Nation.

Rhode Island PTA is committed to the principle that our very young children need and deserve special care, nuturance and instruction. It is with some dismay that we have learned of the short average tenure of our early childhood education teachers and the apparent lack of quality and specialized instruction available to such teachers, particularly amid the burgeoning demand for preschool and kindergarten instructors. We are relieved that our government has recognized this problem and are pleased to support its efforts in the form of Title V of this bill.

Agreeing with the congressional findings that mastery of subjects in the mathematics and science fields are vital to the Nation's economic future, we support Title VII and its goals. Like the National

PTA, we also are concerned with the under-representation of women and minorities who are not counseled into math and science careers.

Rhode Island PTA wholeheartedly welcomes the shared decision-making initiatives that are addressed in Title VIII, recognizing the opportunity such provisions would offer parents and teachers to more effectively impact the operations of their individual schools.

In regards to S. 1676, the findings are indeed sobering and yet we agree with their hopeful conclusion that the Federal government has a leadership role in leading the charge for a renewed public commitment to the support of teachers and teacher training.

The Rhode Island Congress of Parents and Teachers supports the vital measures addressed in these bills. We believe they are in harmony with the longstanding tradition of PTA efforts to strengthen our public schools and to insure that educational reform benefits all children.

Thank you.

Senator PELL. Thank you very much, indeed, Mrs. McQuade.

I would like to return to Dr. Duerr for a moment. You say 40 percent of the youngsters in Westerly are now having breakfast?

Ms. DUERR. In my school.

Senator PELL. In your school.

Ms. DUERR. In my school.

Senator PELL. Basically this cost is borne by the community?

Ms. DUERR. That's correct.

Senator PELL. What are the reasons why they should have breakfast at school rather than at home?

Ms. DUERR. Because I've strongly suspected that many of the children in my school don't have breakfast and in some cases, children may have breakfast at home but they've had breakfast so early before they're dropped off at the day care providers at seven o'clock as the parents go off to their first shift job, that by the time ten o'clock rolls around, that breakfast is no longer standing by them.

Senator PELL. Is yours the only school in Westerly that gives breakfast?

Ms. DUERR. All primary grade schools have started the breakfast program.

Senator PELL. How much does it cost the students to get breakfast?

Ms. DUERR. For students who qualify for free lunch under the Federal lunch program, that breakfast is free. If they qualify for reduced price lunch, they pay twenty five cents, and all other children pay forty cents.

Senator PELL. What would be the number of children who pay the forty cents, full freight?

Ms. DUERR. In my building, I don't have the specific data on that, but it's probably about a third of them.

Senator PELL. Two-thirds get reduced?

Ms. DUERR. Get reduced or free.

Senator PELL. Some of the school based proposals would create a team of teachers and school administrators of parent community representatives to make decisions regarding the school day traditionally made in the past by the central administration. How do each of you view the idea that there should be greater decision making on the part of the teachers themselves?

Mr. CONNORS. Senator Pell, that is paramount I think to bringing about change in education. I think if you look across the State, across this Nation, more and more school systems——

Senator PELL. Can you hear?

Mr. CONNORS. More and more schools are recognizing that in order to change schools, you have to give the parents, the teachers and others that right to participate and I think if you look, for example, here in the State of Rhode Island, we have a school without a principal. There are other communities that have brought in that concept and it's necessary just as I pointed out in my remarks that if we re going to have teacher training, it should be done at the colleges, it should be done on the—in the local communities and teachers in that community ought to shape what that program is going to be and what are the needs that they need to bring about in terms of staff development. Participation—articipatory management in every school district I think is tantamount to bringing about change in any legislation that helps to bring in the parents and the teachers and help to retrain the administrators so that they can give up that territory, I think we'll have a dramatic impact on how schools are structured in the future.

Ms. DUERR. The district in which I work has been very much involved in having a participatory management approach in the school system. Interestingly, the initial impetus for this came from the school committee level where we had one individual who was involved in personnel management in private industry who was very interested in the quality circle approach to manage it from an industry perspective and encouraged the school system to get involved. We now have active involvement in this type of program. We have one building that operates almost totally with the participatory management team comprised of classroom teachers. There is a principal in another building who's assigned in an umbrella approach to that building, but the day-to-day decisions are made by that team of teachers in that building.

Senator PELL. Mr. Connors mentioned earlier that there's a school in Rhode Island that had no principal at all as a matter of desire, is that correct?

Mr. CONNORS. We have a school in Woonsocket that I thought that was at a time when everybody was talking about empowering of teachers and rather than talk about it, we did it. I went to the school and I asked the teachers if they would be interested, they said they liked the concept and the Union was very cooperative and the teachers guild as well as our school committee, so we turned over the full responsibility to that school to the teachers and it's in its fourth year and it's actually worked out very well.

Senator PELL. From a mechanical viewpoint, procedural viewpoint, how does that work; who brings the group to order?

Mr. CONNORS. What the teachers do is they have a rotating chairperson that each of the teachers takes a turn serving as chairperson just to make sure there is one person. For example, if we have administrative meetings, that—then that individual is represented there. But each of the teachers are given out various responsibilities that were in the past taken on by the principal of the school. And it gives them a better understanding of what some of the difficulties are in the day to-day operations of the school. It's gotten them more involved, certainly has lengthened their school day and in some schools, I think it's like team teaching. The teachers have to be committed to it, they have to be—personalities have to mesh, but if you can get that kind of participatory management, it's more effective than one individual because now you're expanding the brain power and the responsibilities over several and I think it's—in many schools it can be a very effective way of managing school.

Senator **Pell**. Does the chairmanship rotate?

Mr. **Connors**. Yes.

Senator **Pell**. Alphabetical order or how does that work?

Mr. **Connors**. They make that decision, we told them, when they took over the school here, the guidelines, you make the decision, so they rotates. Some years they've had all seven teachers involved as the chairperson, other years it's only been four. But they make the decision as to how it will rotate.

Senator **Pell**. Sort of like Swiss government.

Mr. **Connors**. That's right.

Mrs. **Adelman**. I also feel that it's vital for our schools to have input from the teachers and parents. I think many school systems are heading that way, some of them much more slowly than others. I think it really depends on the climate in the school and the problems the school systems have in managing their students. I come from Barrington, we don't have as many problems as some of the inner-city schools. We do strategic planning. Our teachers are very involved in what's going on in our schools. They plan the in-servicing, they give the in-servicing. We have a tremendous amount of talents in our system. Parents are very involved. That doesn't happen in an inner-city school, you don't get the parents involved and teachers have so many other problems to deal with with their students, so I think that requires a great deal more work and efforts, but I think it's important.

Senator **Pell**. Mrs. McQuade.

Mrs. **McQuade**. I agree totally. I think it's clear that children school performance increases proportionally to their parental involvement. And I think that parents would welcome the opportunity to have more meaningful input. We agree totally.

Senator **Pell**. Thank you very much. I think the most novel idea that's come along is that you can govern by the teacher body as a whole, that maybe principals are not needed in every school.

Mr. **Connors**. I think, Senator, you're certainly—I think effective leadership is important anyway that you can obtain it in the school and I think unfortunately our schools are the last pillar of our society that haven't changed over the decade. If we do not change, don't restructure them, then I think that some of the future doom that we see in education will take place. Your legislation talks to retraining teachers and please keep in mind that one of the speakers said earlier, our teachers have been in the profession a long time, many of them have probably got another ten or twelve years before they retire. These people have to be retrained, they have to look at what we know about how children learn and change their teaching strategies. If we can do that and then be free enough from school committee superintendents and principals to say, here, run the schools, involve the parents, then I think we can make a difference. Otherwise, it's going to be more of the same. I think much of your legislation speaks to that and therefore, I think that you should be commended along with Senator Kennedy and to push as much as you can for teacher training, teacher participation in management and involvement. Total school committee running of schools shouldn't be done by one individual.

Senator PELL. Are there any other schools in the State that you know of that share principals, or in Westerly? We know of a school with no principal in Woonsocket, are there any other examples of this in the state?

Mr. CONNORS. One I think is Minnesota. Most people are afraid of it. It's like much of what you hear today, most of us in education, once you tell us we have to change, we'll change and do a great job. However, if we are not told to change or asked to change, we're content with staying with the status quo. I think that we need to look at new ways of structuring our schools and say to teachers, you want to run the school, do it, give them their responsibility and hold them accountable. And unfortunately, school committees and superintendents and others are afraid to make that leap, but I think you have to believe in teachers; given the responsibility, they can't wait to get into school. Being told what to do every step of the way, then it makes their job very frustrating.

Senator PELL. But as far as you know, in Rhode Island, there's no other example?

Mr. CONNORS. It's the only school in the Nation.

Senator PELL. The only school in the Nation. One.

Mr. CONNORS. We are willing to do it in all schools in Woonsocket if we could find—because it does cost, of course, you have to make sure you have adequate staff, that you have adequate clerical help and that you can insure that the teachers have the time for planning.

Senator PELL. Thank you very much.

Ms. DUERR. I'd like to respond to that sitting here representing the Rhode Island Association of School Principals, I have to respond to that.

First of all, I think Mr. Connors made a very important point, he talked about all seven teachers getting involved. That's the size of that school. The school in Westerly without a principal has seven teachers. Perhaps if all the schools were that size, we could do away with principals. But I think those of us who work in buildings that are larger see many—many other roles for the principals and I think that's the key. The classroom teachers need to be involved in making those decisions that effect what's happening in the classroom. I think there's definitely still a role for the building principals and that role would change. It might include such things as becoming more aware of some of the research that's out there and being a resource person to the teacher teams, getting that gather that information for them.

Senator PELL. Another question for each of you, what's the obstacle that you find the most difficult in recruiting teachers for your schools?

Mr. CONNORS. Concluding?

Senator **Pell**. No, what's the biggest obstacle in recruiting somebody to teach in your school?

Mr. **Connors**. I think it's been spoken of by many of the panels. Unfortunately, education today is given a bum wrap, when in reality if you look at the statistics, we're doing a better job today in American public education than we've ever done. I think the biggest problem we have is that people always get lip service to improving the qualities of education, but they don't want to invest in it.

The final remark and on my paper that I gave to you is that I hope that through the efforts that are happening in Europe and around the world, we can lower our defense budget and the Federal government will play a major role in investing in education, that's what we need. We also have to say to teachers, it's a full-time job, 240 days a year, come in, we'll pay you $60,000 or $70,000 a year. I think that kind of approach along with the ability to make some of the decisions about what happens in school will make significant changes, but until we're willing to make that kind of leap, teachers work all year, pay them $75,000, $80,000, a lot of people are going to be reluctant because in the sixties when your legislation in terms of writing off students loans first came in, people were committed to working in the social agencies and in education. Today we have a very materialistic society, people are interested in the dollar, they have to be when you look at the price of things, so that a lot of people for tremendous very practical reasons choose not to go into education. The other thing, anyone going into education has to first of all have a love of all children, have a commitment to learning, love the learning process and be dedicated to this whole business of public education. If you don't possess those qualities, don't go into it because you're going to frustrated.

Senator **Pell**. Dr. Duerr.

Ms. **Duerr**. Personally, I haven't encountered any difficulties in recruiting teachers. Westerly being a suburban community, a pleasant place to live and a relatively good, comparatively speaking, teacher salary structure, we have not had a problem recruiting very competent teachers, particularly at the elementary level. There are areas of specialized training where we are having difficulty, areas such as the math, science field, health education, school nurse teachers are some of the areas that we are finding it difficult.

I was interested in hearing that there are nurses back in the schools getting training and I'm sure that's because in Rhode Island, in order to be a school nurse, you're, in fact, a school nurse teacher who's a trained teacher and part of their role is health education.

Senator **Pell**. Mrs. Adelman.

Mrs. **Adelman**. I think it also depends on the system that you come from, some areas have difficulty and some areas do not have difficulty, but if I were to look it at it from a general point of view, obviously, salary is an aspect of it; but I think a big part of it is the perception of the teaching profession and we have now for 10 years listened to what a terrible job our teachers are doing, how awful our education system is, and everybody blames the fact that these children are coming in without breakfast, they're coming from homes and that's for some reason the teachers' fault. I have three—two children in college. Teaching is not something that they're looking into because what do they hear—they don't hear anything positive about the profession. I think if just one time somebody acknowledged the fact that we are educating a larger percentage of our students than any of these other countries, we deal with special Ed. students, we deal with the larger minority of students, if we make it something that is a challenge and it's a wonderful thing that we're doing, I think other people might possibly be more interested in joining in the teaching profession.

Senator PELL. I think it's not so much that we're doing a worse job but it is that other countries are doing a better job.

Mrs. ADELMAN. Yes, but comparing apples and apples

Senator PELL. It should be positive.

Mrs. MCQUADE. I agree totally with what she just said, that one way that parents might be able to encourage their children to go into the teaching profession is if they themselves knew a little bit more about it and had a stronger relationship in the school, they might be able to it. Many do understand, but it's through their direct involvement in parent teacher groups that they learn about the workings of the school or come to appreciate the role of the teacher and/or the principal, but I think that their could be help from that point.

Senator PELL. Maybe they are experimenting with high salaries in Rochester where they're offering, I believe sixty-five, seventy thousand a year as a base pay and they're studying that and following that closely to see what will happen and I think Mr. Connors mentioned that teachers should be teaching 240 days a year, that's true, too, of the students, they ought to be learning 240 days a year——

Mr. CONNORS. Well, Senator——

Senator PELL [continuing.] Instead of 180 days.

Mr. CONNORS [continuing.] Think one thing you have to be careful of, if teachers never have an opportunity to get away from students, they'll never be able to develop. One of the problems we have now, if you put in a full day at teaching, you don't have time for meetings after school. I think people have to also recognize that more of the same isn't going to bring quality. A child needs some time to grow and develop in other ways. Teachers need time to grow and develop in other ways, just as parents, we'd love to send our children off someplace so we can grow, I think it's the same for teachers. You cannot have children in school 240 days of the year and expect teachers to be there and see any change. Teachers need time for staff development. We don't give that to them, they don't have that, that's why I'm so excited about your legislation. It recognizes the need to afford teachers the opportunity to grow and develop. Without that, we will not bring about change, so I disagree that we need to keep the children school for more days. For example, in Japan, they have children coming for more days, it's not teacher time, it's for enrichment activities. It's a whole different approach and people fail to recognize that. So that teachers need the time, the professional growth. Give me those 30, 40 extra days with my teachers and we'll make substantial changes in education. But also understand that children learn in other ways and they shouldn't be in little square boxes all of the time, we need to reach out into the community, we need alternative forms of education.

Senator **Pell**. I agree, too, with the importance of investing in education. There is no greater investment this Nation can make. As I've said many times, really the strength of our Nation is not in its weapons of destruction machines of construction, the real strength is the sum total of the education and character of our people.

Mr. **Connors**. Senator Pell, and you've been a friend of education all of your years in the Senate and you certainly have stood up and insured that moneys have been invested in education, but across this country, if you look at our expenditures and then you want to make a comparison with those other communities or other countries that they point to such as Japan and Germany as having higher test scores, when you look at what they invest in education versus the United States of America, we're falling behind and that's where we have to say to all of the people that the priority ought to be in investing in education, putting dollars into technology in our schools, going to the cities and building them schools and learning environments that are going to enrich the opportunities for these children and most of all, retraining our teachers and finally one point that hasn't been made and should be, we ought to send our young to schooling teacher education preparatory programs, at the end of 4 years, give them to us in the public schools with master teachers and spend a year under the guidance of a master teacher before you get certified and I think that can take that approach and that we'll have better teachers in our schools and change the outcomes that we see.

Senator **Pell**. Well, I thank you and I thank our third panel very much, indeed, for being with us and for your contribution to the original ideas that have come out of your panel and the other panels this morning.

Before we wrap up, I didn't know if there are any comments from the audience, if anyone wants to make a point or contribute a thought, if they would like to, this hearing is open and everyone is welcome. This gentleman here.

STATEMENT OF S.K. "CHHEM" SIP, EXECUTIVE DIRECTOR, SOCIO-ECONOMIC DEVELOPMENT CENTER FOR SOUTHEAST ASIANS OF RHODE ISLAND, PROVIDENCE, RI

Mr. **Sip**. I'm delighted to be here today and I always think of you as the father of educational enforcement and establishment.

I've only been here over a decade ago. I lost everything when I came here, but I believe in education. That's why I'm here today. As you can see, there are 50 percent of Southeast Asians in this room today because we take education as an important issue in our life. I'm sorry, I get a little bit nervous, but however, I tried to make some points.

My name is Chhem Sip. I am Executive Director of the Socio-Economic Development Center for Southeast Asians. I've been in your office in Washington, DC concerning Southeast Asian issues back in Southeast Asia last year.

I'd like to read my little notes to you. I passed my letter to you. Please be patient with me.

Senator PELL. Take your time.

Mr. SIP. I am Chhem Sip. I am Director of Socio-Economic Development Center for Southeast Asians. I have been involved in Southeast Asian communities for the past 10 years. I have witnessed the need of bilingual teachers in all education areas, elementary, secondary and higher educations. There are many Southeast Asian refugees and immigrants coming to this country who were previously well-educated and certified in all areas of education. In Southeast Asia, we had certified teachers of English and French, and similar studies that are taught here in the United States.

As you already know, that there are between 14 and 15 thousand Southeast Asians living in Rhode Island and one out of every six students registered in the Providence public school is a Southeast Asian student. This static was taken from a survey conducted by the Rhode Island Community Foundation.

On the behalf of the Southeast Asian community, I urge you and the Rhode Island Department of Education to grant more emergency certificates to bilingual and multilingual teachers who are in the process of gaining their United States certification. By doing this, you're not only helping the prospective teachers, but most of all, you're helping the children who are in desperate need of bilingual teachers to assist them in developing their economic skills and preparing them to achieve their future goal in this great country.

The Southeast Asian community supports the 18 point recommendation which was submitted by Mr. Joseph Almagno, Providence School Superintendent. Please see the attached that was in the paper this week.

On behalf of the Southeast Asian community, I am grateful to you for your support of the Southeast Asians in this country and ask you for your continued effort.

Senator PELL. Thank you very much, indeed and if there are any other statements, I would add the statements will be inserted in the record as if read. Is there anybody else would like to—come forward.

From the audience. Senator Pell, I'll be brief, you asked the last panel if they knew of any innovative programs of the decision-making process in the hands of educators and I'd like to briefly tell you of a very innovative program we've put into effect at Shea High School. We have 90 faculty members, nine hundred students with a declining enrollment. Last year, we were looking at losing faculty, so the administration allowed us to start a program called On-Site which involved parents, teachers and students to address truancy, tardies, and implement an in-house suspension room in our school. This program has allowed—has improved faculty morale because it's allowed a large number of faculty members with no room for upward movement to start using their administrative skills and make decision making—have a role in the decision-making process which has benefited our school. So there are some very innovative things going on in schools in Rhode Island.

STATEMENT OF JOSEPH R. LE, DIRECTOR OF FINANCE, SOCIO-ECONOMIC DEVELOPMENT CENTER FOR SOUTHEAST ASIANS OF RHODE ISLAND, PROVIDENCE, RI

Mr. LE. Senator Pell, I'm Joseph R. Le, Director of Finance of the Socio-Economic Development Center for Southeast Asians.

Today I am speaking on behalf of Mr. Tam Van Le, a teacher and assistant principal of a high school in Vietnam.

According to the documents he was able to take out of Vietnam, all of which have been officially evaluated and translated into English, Mr. Le holds a baccalaureate part two in language and literature, as well as a diploma certifying that he successfully completed 2 years of college-level pedagogy studies. From 1971 to 1975, he was a teacher and the principal of My Phuoc Tay Elementary School in My Tho Province, a school serving approximately 500 pupils. From 1976 to 1980, he was assistant principal of Tan Hoa High School which has an enrollment of 1,500 students.

Finding life as an educator under communist rule intolerable, Mr. Le fled to Indonesia and eventually to the United States in September, 1981. He is not a United States citizen.

In 1983, Mr. Le and I visited Rhode Island College in an effort to learn how he might prepare himself to apply his training, his experience and his considerable talents to the educational needs of Rhode Island students. He recognized that, as a bilingual Southeast Asian educator, he could be of inestimable help in bridging the cultural and academic difficulties facing the one in six public school pupils in Providence who come from Southeast Asian homes.

The answer he received at Rhode Island College was discouraging. This former school principal could not be recertified unless he began college all over again, unless he started as a freshman and studied full time for 4 years.

Because he had to support himself and also his wife and children who still remain in Vietnam, Mr. Le chose to go to work in a factory instead.

Rhode Island is deprived of an educator whose life experiences as well as his education could certainly enrich the lives of many students, American born as well as foreign born.

I have seen a billboard whose message I think applies here: A mind is a terrible thing to waste.

Thank you, Senator.

Senator PELL. Thank you very much, Mr. Le.

I would like to limit—the Chair has to be moving along, I'd like to limit the statements to less than a minute.

This lady there.

From the audience. Very briefly, I would like to makes a——

Senator PELL. Identify yourself.

From the audience. I'm from the University of Rhode Island, Urban Field Center. Just a short suggestion, as I understand you're going to have a few more of these hearings. Since today there was mention several times that minorities should be encouraged to pursue an education of teaching, I suggest that perhaps you would invite a few minority members to testify on the panel.

Senator PELL. Good thought.

STATEMENT OF GERARD NOEL, SUPERVISOR, IMMIGRATION AND RESETTLEMENT, CATHOLIC SOCIAL SERVICES, PROVIDENCE, RI

Mr. NOEL. I would applaud that, also.

I'm Gerard Noel, I'm supervisor of Immigration and Resettlement, Catholic Social Services and I'm also a member of the Governor's Advisory Council on refugee resettlement, so I feel I come before you to speak to the issue.

One thing I want to highlight from my already presented testimony is that at present today in Providence, there are only presently two bilingual teachers and they're part of the ones who have been emergency certified. One is conducting testing at the elementary level and the other is in the industrial arts of Central High School and one of the previous minority speakers indicated one out of every six students in the Providence system alone is a refuge, and the majority of those—many of those are Southeast Asians. So, and as Mr. Le mentioned previous to me, it is a sad situation when people are discouraged and I didn't discuss this before, but I made the same point regarding the discouraging aspects of minorities trying to get into the teacher—teaching profession.

My conclusion is that it's been my professional, personal experience that we become more tolerant of others and even accepting of people different of us once we get to know them as individuals with goals and aspirations similar to ours rather than just one other ethnic group, but I feel that the presence and the varied cultural background of additional bilingual teachers, minority teachers, will bring culture diversity and through this, will help us know each other better through relating our personal experiences.

Thank you.

[The prepared statement of Mr. Noel follows:]

PREPARED STATEMENT OF GERARD A. NOEL, JR.

I am honored to be able to present testimony this morning. Having served as Supervisor of Immigration and Resettlement at Catholic Social Services for the past 15 years and on the Governor's Advisory Council on Refugee Resettlement since 1987, I feel I can speak about the concerns and needs of the new Americans in Rhode Island, whether they be newly legalized aliens or newly resettled refugees.

From the reports you receive from the U.S. Department of State, you are aware that the U.S. has absorbed 1.3 million refugees since 1975, nearly 1 million of them being Southeast Asians. Also according to the Office of Refugee Resettlement, although Southeast Asian arrivals are now decreasing, we will be absorbing more Soviet refugees in the foreseeable future.

Locally, Rhode Island has welcomed significant numbers of refugees so that, at present 14,000 are Rhode Island residents, and the majority of them are self-sufficient and productive.

Our schools have become multi-ethnic and multi-cultural, particularly in Providence where approximately 85 percent of the refugees in R.I. reside. Currently one out of every six students in the Providence schools is a refugee. Most of them are from Southeast Asia, however, the Soviet child is being seen more frequently. In the past few months Soviet refugees have arrived in R.I. at the rate of 60+ per month.

I strongly support the legislation you are proposing. I feel, however the emphasis should be on programs to train and certify bilingual teachers. In 1990, in Providence there are only 2 bilingual teachers. They obtained emergency certification; one is conducting testing at the elementary level and the other is in Industrial Arts at Central High School. Neither has full certification.

A number of refugees who are resettled possess work histories which include a teaching background in their own country. Many possess excellent educational backgrounds and were professionals in their own country. However, due to the difficulties of certification, union regulations, budget constraints and college education curricula that are not specifically geared to the bilingual student, etc. the new Americans are discouraged from pursuing a teaching career and look to the business world as an alternative. Their talents are being wasted while the children are without bilingual teachers.

Obviously, I am not a teacher but I am a concerned constituent who is recommending that whatever monies and programs result from the legislation, a significant block should be allocated to the training and certification of non-native speakers whose education and background qualify them as teachers.

In conclusion, let me say that obviously we are all the beneficiaries of the addition of bilingual teachers to our schools. Of course, the primary beneficiaries are the students both Limited English proficient and native speakers. Furthermore, a secondary benefit, equally as important will be that the presence and varied cultural background of these teachers will bring cultural diversity to our schools and our communities. This cultural diversity and awareness will help us know each other better through the relating of personal experiences.

It has been my professional and personal experience that we become more tolerant of others and even accepting of people different from us once we get to know them as individuals with goals and aspirations similar to ours rather than as just an ethnic group. The benefits are priceless.

Senator **Pell**. This lady in red.

STATEMENT OF SANTHANY P. VANGAEMPHAN, TEACHERS AID, PROVIDENCE, RI

Ms. **Vangaemphan**. Thank you, Senator.

Dear Senator Pell, I am presently a teacher aid in Providence. In 1978, I graduated from Ecole Superieure Pedagogique in Laos. My major was math.

When I arrived in the United States in 1978, I was faced—faced an enormous problem trying to get a certification necessary for me to teach here. Due to the war in my country, I was unable to bring my credentials with me.

In Laos, I concentrated on the following courses, chemistry, physics algebra, physics, trigonometry, calculus and statistics. These courses are based on international language. They are not cultural- or language-specific.

My discouragement began when I was refused permission to take the college CLEP tests. The interviewer looked at my face and said, you take ESL, you cannot take the CLEP. It is too advanced for you. I feel that, in this country, I should not be denied the right to take the CLEP because English is a second language for me. If I took it and failed, then I would better know what I needed to learn to achieve my goal of becoming a teacher.

I started all over again, got my GED and took essential college math. This is where I gave up. In that course, I felt like you would, Senator, if the United States Government told you to take a course that would teach you addition and subtraction. I lost my self-esteem and gave up.

My recommendations are; one, allow foreign students to take the CLEP, two, permit foreign students to challenge college course that they have previously taken, three, require teacher trainees and teacher trainee instructors to take a course in cultural diversity.

Thank you.

Senator **Pell**. Thank you very much.

JOUA HANG, HMONG SERVICE AID, STAR PROGRAM

Mr. **Hang**. My name is Joua Hang representing the Star Program.

Senator Pell, I would like to bring to your attention the desperate need in Rhode Island for money to be earmarked for bilingual vocational training for refugees only. There are currently 14,000 refugees in our slate and there is not one bilingual vocational education teacher available.

The Star Program, Success Through Assisting Refugees, is funded by the Office of Refugee Resettlement and Services and our community mainly through developing training programs resulting in upgrading job placement.

We encounter three major difficulties. The first crucial problem is funding. Another problem is locating an adult vocational program with a teacher on staff who is willing to work with refugees and a bilingual aide. This is an important component in order to insure the success of the class. Our third problem is recruiting from within the refugee community someone who is willing to serve as a teacher aide in a bilingual capacity. Our training programs depend on residual money. No money, no training.

The Star Program has been in existence for 1 year and has served over 425 refugees. Of that total, only 9.9 percent were able to be placed in training programs. However, 95 percent of those placed in vocational training graduated and were either upgraded at their present places of employment or job placed with another employer at a higher rate of pay.

The need for bilingual training is desperate. Only a few years ago 3 months of training was adequate for successful job placement. Technology has changed so rapidly that 3 months of training is no longer adequate, especially if done on a part-time basis.

Our plea is to have money earmarked only for refugee bilingual training. If we had money, so much more could be done to serve those who have chosen the United States as their new home. Their cultural gifts will only add to the productivity and diversity of the American workplace.

Thank you, Senator Pell, for your assistance in this matter.

Senator PELL. Thank you very much. Yes, sir.

Mr. MARIANO. My name is Charles Mariano. I'm not an educator, but I am a father of one that wants to be an educator that spoke here today and husband of an educator.

I think listening to everybody here, not being an educator, I probably make more money than most of you, I'm a brick layer. The problems are so—come down to one thing, your problem, Senator, money, budgetary restraints. I think it's time to come to this country, take a pole, see about a tax that cannot be touched for no other reason but for education, a gasoline tax, whatever and mandatory by law that it has to be used for education.

As a grandfather with children in school, I still see the needs of my grandchildren, even though my children aren't children. So, Senator, I think you have more problems than they do with money. Thank you.

Senator PELL. Thank you very much. I add that there's major emphasis in the Kennedy bill on training bilingual education teachers, so this program we're aware of, not doing enough on it, but we are aware of it and hearings like this that make it more sensitive to the problem.

I see this lady there.

Ms. **Stager**. I'm Pamela Stager. I'm here today as a representative with of Children's Aides for Higher Education, a new statewide initiative aimed at trying to get more Rhode Island students to high school graduation and beyond, emphasis and support to students rather than teachers. I think we're all in the same bottomline area here and I would just like to take budget restraints being what they are, I'd like to take full advantage of the hard work of yourself and your staff and invite the very knowledgeable and representative people that are in this room today to talk with me after the hearing today about how we can best use your constituent's input into creating the best program we can put on. Thank you very much.

Senator **Pell**. Thank you. I think this lady here.

VIRGINIA RAHILL, AREA DIRECTOR, NEW ENGLAND FARM WORKERS COUNCIL, PAWTUCKET, RI

Ms. **Rahill**. I'm Ginny Rahill and I'm the area director for New England Farm Workers' Council.

I'm here today to advocate bilingual teachers for the refuge community and elementary, secondary and special vocational education areas and I have submitted a document for the record.

[The prepared statement of Ms. Rahill (with attachments) follows:]

Prepared Statement of Ms. Rahill

My name is Ginny Rahill and I am the area director for New England Farm Worker's Council. For the last 15 years, the RI office of this New England agency has been providing education, training, employment and supportive services. During the past 9 years, those services have been available specifically for the refugee population of RI.

One out of 6 school-age children are refugees in the City of Providence. There are 14,000 refugees in the State of Rhode Island. Fifty-six percent of these individuals are of the working age. The largest group of refugees are Southeast Asians with the newest influx being Soviets.

I am particularly interested in the lack of bilingual teachers to educate and train these new citizens of Rhode Island for the future workforce and the reason I am here today is to advocate for bilingual teachers for the refugee community in elementary, secondary and especially in the vocational education area.

Everywhere you read these days there is an article on the future workforce similar to the recent one in the Wall Street Journal on Education "The Knowledge Gap" and they state "from now until the end of the century, 88 percent of the workforce growth will come from women, blacks and people of Hispanic or Asian origin, including immigrants." If we are to properly educate and/or train the Hispanics and Asians, we need to start with bilingual teachers.

Many of the refugees who have come to Rhode Island, especially, the Soviets, have such skills as fork lift operator, excavator, welder, locksmith, plumber, heating engineer technician, model maker, mechanical instrument maker, program analyst, engineer technician, physician, computer researchers, and each with a good number of years of experience in their own country. These skills could be transferable but they need to be adapted to the United States' standards and technology. This is not presently possible because the training programs that do exist are not equipped to deal with the bilingual aspect of it. These talented people are placed in entry level jobs. Employers indicate to us they are bright, quick and can pick up any skill but because of the lack of bilingual training, this talent is wasted. The workforce needs these refugees and they need to be trained for upward mobility.

I would like to read to you excerpts of two letters written by Soviets who recently arrived in Rhode Island. See attached.

As a possible solution to this problem, I would like to recommend that monies be set aside specifically to train and certify bilingual teachers. It is also our hope that teachers could be trained to be culturally sensitive to this wonderful resource for future employment.

Attachment A

My name is Yakov Gonchar. My family and I are Soviet refugees from Leningrad, USSR. We came to America on December 11, 1989. My profession is plumbing. I have experience in Soviet Union for more than 10 years. In America I have found that you need English to find a job. Because there is a difference in plumbing systems in America and Russia, I need assistance in learning this new technology. I have found that it is important to have instructors who can translate most helpful, especially English instructors. For me to be part of the American workforce, it would be beneficial to have more instructors.

Thank you.

Yakov M. Gonchar

Attachment B

My name is Yury Yaroshenko. My wife, Natalya and family are Soviet refugees from Kiev, USSR. We arrived in American on December 5, 1990. Both my wife and I are trained and educated as computer programmers. It would be most beneficial if more bilingual instructors were available to help us with learning English and assisting our understanding of Computer Technology so that we can enter the workforce as productive citizens.

Thank you.

Yury and Natalya Yaroshenko

Senator PELL. Good, the statements will be inserted in the record in full. I think there is time for one more, then we should wrap up. This young man.

From the audience. Good morning, Senator.

I'm currently enrolled in this college. What I'm here today, I guess I just want to ask that you help us Southeast Asians. In your bill, we have named Southeast Asians and why I'm saying that, I'm speaking of the fact when we go to the administrator, we are bilingual, we get sent to the bilingual department, we go there and they say, I'm sorry, I'd like to help you very much, but this program is for Portuguese and Hispanic, so if you please help us fit in your bill Southeast Asian, Cambodian, Hmong, Laotians, and Vietnamese. Thank you.

Senator PELL. Thank you very much. Yes?

MICHAEL BONS, VICE PRESIDENT, RHODE ISLAND STATE TECHNOLOGY EDUCATION

Mr. BONS. Thank you, Senator Pell. My name is Michael Bons. I'm vice president of Rhode Island State Technology Education.

I'd like to leave you with a little sentence here: Technology is an increasingly part of our lives. According to the Department of Labor, 80 percent of all new jobs would be in the vocational area. We need students capable of making rational decisions concerning the use of technology and in subsequent affects on our society. Consequently, an educational structure is required which allows students to make practical application of math, science, technology, and the humanities. The technology education course of study centers around four major technology systems, communications, manufacturing, transportation and construction. It is specifically designed to develop the problem-solving ability and to create resourceful necessary written and oral communication skills of all students centered in local educational agencies. We are uniquely placed to develop the technological Literacy of all students, middle school level serves——

Senator **PELL**. Your piece will be put in the record as if read if you would like.

Mr. **BONS**. The middle school level serves as a connection between the public vocational schools. The high school level is through the integration of math, science and technology. In addition, we have enhance and develop augments, other developmental programs, Rhode Island Two Plus Two Programs, for example, thus providing a link between secondary and postsecondary schools for otherwise at-risk students. It is essentially to expose students with special needs from those gifted to this educational discipline with special emphasis on general track or at-risk. When compared to the special needs and gifted students, very little time has been devoted to average students, many of whom are low achieving and talented students.

Thank you.

Senator **PELL**. Thank you. I think we should wrap it with up this lady here.

Ms. **BODEAU**. My name is Marsha Bodeau. I am a job specific English instructor with CCRI, intensive tailored training program for Southeast Asians. Today, I am here representing the concerns of my Southeast Asian students, in particular those concerns that are directly related to and need to be taken into consideration in consideration of changes made in teacher training programs and teacher certification. I would quite simply like to quote some of my Southeast Asian students who have spoken in the course of past—in the past week and expressed to me their concerns and their needs. One student says, when he arrived in Providence last year coming from a refugee came in Thailand, his children started school right away. But with no bilingual teachers, his children couldn't understand anything. Another student said when her family arrived here in September, 1984, only one of her four children started school immediately, even had a bilingual aide at school. Another student stated that his child started school in September, 1989 at the age of six. He didn't understand English at all, but there were no ESL classes for him, he felt very shy and was afraid of his teacher. Another student said that his seventeen-year old is in ninth grade because his English skills are still so weak after 2 years in school. Here last, one more student has a niece fourteen years old who has been in school here since her arrival two and a half years ago, but she still doesn't understand the teacher. There is no bilingual instruction, and ESL is in insufficient or ineffective. He also has two cousins, one nephew in tenth grade to whom the teacher gives only math homework because the English isn't good enough to do the homework in other subjects. They have had some ESL instruction for two and a half years.

Thank you very much.

Senator **PELL**. Thank you very much, indeed. I would add in the vocational education act there are provisions for bilingual training. I would agree with the group here that there should be more of an emphasis on Southeast Asians, which is the latest waive of immigration and refugees who have come here. I recognize the sacrifices that many of the Southeast Asians made for the United States in the course of the Vietnamese war and we do have a very real obligation to many of them.

I would like to thank Senator Kennedy for being represented here. I would add that the record will stay open for a week so that if anybody has an additional statement they would like to insert in the record they should please send it to me.

I would ask if any representative of my colleagues, Senator Chafee or Congresswoman Schnieder, Congressman Machtley is present. In any case, the record will stay open for any questions that may be asked.

I would like to say a special thanks to the people at Rhode Island College for hosting this event, Dr. John Nazarian who was very gracious in offering us his campus. Particularly a thanks to Catherine Sasso who had the task of coordinating all the details of this event and finally, thanks to Tony DelGudice who keeps the building in the impeccable shape that it is in.

[Additional statements and material submitted for the record follow:]

SOCIO-ECONOMIC DEVELOPMENT CENTER (SEDC)
FOR SOUTHEAST ASIANS OF RHODE ISLAND
620 Potters Avenue
Providence, Rhode Island 02907
Tel. (401) 941-8422

February 16, 1990

Honorable Claiborne Deb. Pell
U.S. Senator
335 Russell Senate office Bldg.
Washongton, DC. 20510

Dear Honorable Pell:

With respect to teacher training programs, awareness of cultural differences needs to be included in the curriculum for certification, especially in the case of bilingual and ESL teachers.

There also needs to be improvement in procedures for assessing whether a child belongs in ESL or mainstream classes in order to ensure regular progress in school. (See diagram) Often children are placed in classrooms according to the color of their skin and hair regardless of whether they are native or foreign born. The black haired, yellow-skinned child goes to the ESL class and the blond child is mainstreamed.

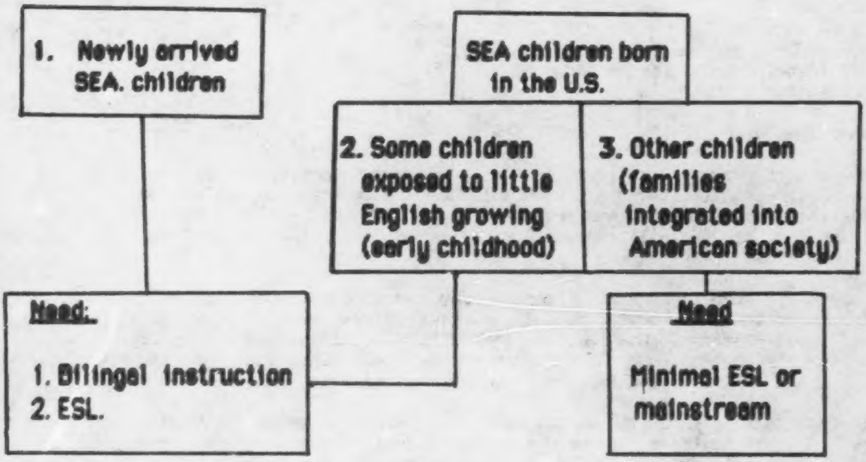
Furthermore, children placed in the first or second grade who arrive with little or no schooling in Southeast Asia need to catch up in basic literacy and study skills. It is necessary to place a bilingual teacher in an area impacted by Southeast Asian children who have not had any previous English language experience.

Please, when you introduce your new bill, take into consideration these important educational concerns of our Southeast Asians in Rhode Island.

Sincerely yours,

Tia N. Kha
Coordinator of SEDC.
tk/f

Needs of LEP. children in the local school system.


1. Newly arrived SEA. children
SEA children born in the U.S.
2. Some children exposed to little English growing (early childhood)
3. Other children (families integrated into American society)
Need:
1. Bilingual instruction
2. ESL.
Need
Minimal ESL or mainstream

40 Hillwood Street
Cranston, RI 02920

February 16, 1990

Honorable Claiborne Pell, U.S. Senator
335 Russell Senate Office Bldg.
Washington, D.C. 20510

Dear Senator Pell:

One out of every six children in the Providence School system is Southeast Asian. Presently, there are two Cambodian instructors who are emergency certified in elementary and secondary education. We need more Southeast Asian teachers who will be exemplary role models for the children of their communities.

Cambodians, Laotians, and Vietnamese have had an educational system in place for centuries, and that affords this country a reservoir of previously trained bilingual teachers. However, the system of re-training and re-certifying bilingual teachers whose second language is English has numerous barriers for those well-educated and well-trained individuals.

The barriers begin at the re-training level when the student attends a program that has been designed by an individual with no cultural awareness or understanding of the student's previous educational experiences. The barrier builds as the student tries to understand the specific content of his or her college courses. The professor usually uses the lecture method with no task-oriented emphasis. Bilingual education research has proven that lecture is the worst method to use with non-native speakers.

The barrier further builds as the students begin to experience some difficulties and the administrators appear to lack empathy and sensitivity to the needs of the bilingual teacher trainees. Most of them are not helpful and do not take the necessary time to understand the problems encountered by the bilingual students.

RECOMMENDATIONS:

Provide administrators and professors with training in multicultural awarness and the educational systems of the cultures their students are coming from.

Tutors are the necessary component for successful completion of course requirements. This should be funded by the college so as not to provide an additional financial burden to the student. Incorporate it possibly into the special grant process many institutions already have.

Provide training seminars for bilingual teacher trainees that update the techniques and teaching strategies used in the educational system in this country. The methods and teaching techniques taught in colleges in Southeast Asia, for example, are similar to those of the U.S. due to the French occupation of their countries.

Provide a six-month practicum experience for the bilingual person who has been previously certified as a teacher in his own country to ascertain if his skill level is equal to that of a native-speaking teacher.

Phath Tum
Meang Taing

David Evans

Community College of Rhode Island
Flanagan Campus, Louisquisset Pike, Lincoln, RI 02865

"A PERSON WHO SPEAKS TWO LANGUAGES IS WORTH TWO PEOPLE."

February 17, 1990

Honorable Claiborne Pell, U.S. Senator
335 Russell Senate Office Bldg.
Washington, D.C. 20510

Dear Senator Pell:

I am urging you to appropriate a specific amount of federal funding for Bilingual Vocational Teacher Training and certification. Eight years ago, the Community College of Rhode Island and Rhode Island College began a project whereby bilingual vocational teacher training courses were provided by Rhode Island College, and an internship teacher training at area vocational schools was coordinated by CCRI. Approximately forty (40) instructors were trained and over three hundred (300) limited-English refugees and immigrants received training and were placed in good paying jobs or were upgraded in their present positions. When federal funding ceased, the program ceased and the limited-English populations suffered.

Bilingual vocational education programs has as one of its primary goals to instill confidence in students, and it also seeks to enhance the self-concepts of limited-English proficient and bilingual students. It focuses on assessing the linguistic and cognitive skills of each student and provides them with whatever educational services they require.

We have many well-trained and successful bilingual workers who are machinists, carpenters, chefs, mechanics, auto body specialists, nurses, printers, secretaries, etc.that would enter the bilingual vocational teacher training courses if they were offered at Rhode Island College. You can mandate that happen in the bill that you are proposing. I guarantee that the courses will be filled if the encouragement and sincerity of the department heads is there.

A bilingual vocational instructor supported by a job-specific English instructor can produce top-level bilingual employees for Workforce 2000. Bilingual skills and talent is available. Please make the programs available for them.

Karon Dionne
Karon Downes Dionne, Coordinator
Intensive Tailored Training Programs

CP

NEW ENGLAND ASSOCIATION OF EDUCATIONAL OPPORTUNITY PROGRAM PERSONNEL
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

MAR 21 [illegible] 10:15

March 15, 1990

Hon. Claiborne deB. Pell
335 Russell Senate Office Bldg.
Washington, D.C. 20510

Dear Senator Pell:

I wanted you to know that I have a different viewpoint from what was presented at the hearing on the reasons why more people do not become teachers.

I have found in the 15 years I have worked in the inner city that folks who come from low income backgrounds such as our TRIO families view the teaching profession as an admirable career and with the added incentives offered in your bill, The National Teacher Act of 1989, I believe would turn to the field in large numbers.

The salaries made by teachers with the additional fringe benefits appear to my EOC clients who mostly are on public assistance or under employed as more than adequate. More important than that teachers have always been a respected profession to which they would be proud to become a member.

Therefore, I do not feel you should view your efforts to increase the numbers of minorities as teachers as a challenge that cannot be met. The RI EOC program would literally have hundreds of clients anxious to enter the teaching profession once the financial barriers are removed and they are welcomed by our higher education institutions.

I believe that the people you have polled concerning teachers salaries are individuals whose family background are different than our TRIO student families.

Please include these remarks as part of the public record.

Thank you for your time and again for recognizing the important role TRIO programs can play within both your bill and Senator Kennedys.

Warm regards,

Brenda Dann-Messier

Brenda Dann-Messier

STAR

SUCCESS THROUGH ASSISTING REFUGEES

OVERVIEW

I. GOAL:

STAR's goal is to improve the standard of living for its clients; to place the client in a well-suited work environment. A satisfied employee is a hard worker. A satisfied employer is a caring and committed employer. A satisfied employer and employee together equal a more productive economy and a stronger citizenry.

II. OBJECTIVES:

A. Upgrade presently employed clients who desire improved salary, benefits, change of shift, or change of position to advance.

B. Develop technical and vocational training programs outside the job site and work hours. Encourage client participation and offer support services in this area.

C. Assist in entry level client placement through:

1) intake interview to assess the strengths, weaknesses, and capabilities of the individual client to provide a mutually beneficial placement for both employer and employee.

2) interview with employer to assess the working conditions, pay scale, benefit package, opportunities for advancement and improvement, and permanence of the job in order to provide the client with a precise job description.

3) follow up support services for both client and employer to provide further training, resolve misunderstandings, clarify and rectify employer/employee concerns, evaluate client commitment, responsibility, punctuality, and intercede on behalf of client and employer.

4) assistance in understanding and appreciating the cultural differences of the employer and employee.

CLASS SIZE REDUCTION

Small classes enable teachers to meet *all* the needs of *all* the students.

Quantity affects Quality

Make it a priority for our future.

NATIONAL EDUCATION ASSOCIATION RI

Teacher Magazine
December, 1989
Volume 1, Issue 3

Smaller Is Definitely Better

A landmark study affirms the importance of class size

Maria Caruso remembers 1986 as the year she knew her students the best. Her 1st graders never acted up. Each child read four or five pages out of a book aloud each day—instead of just a paragraph. Every day she watched and guided the children as they wrestled with 10 or more math problems, instead of just trying to gauge their progress as she marked up their papers at home at night. That was the year Caruso was randomly selected to teach a class with only 14 students, as part of a landmark study on the effects of class size on student achievement.

"It was wonderful," she remembers. "Before, when I taught 24 or 25 kids, I would get home and think, 'I didn't get a chance to talk to Bobby today.' But, in the small class, I always knew how the students were doing—academically, and as people."

Caruso says her students did particularly well that year. Achievement scores from her students—and more than 6,500 others involved in the study—show conclusively that reducing class size to an average of 15 students has a consistent, substantial impact on reading and mathematics performance among K-3 students.

Project STAR (Student/Teacher Achievement Ratio), as the study is called, represents a four-year effort to monitor the performance of students from 75 schools across Tennessee as they advanced from kindergarten through the 3rd grade. It was mandated by the Tennessee Legislature in 1985. In the first year of the study, participating students were randomly assigned to a small class (13-17 students), a regular class (22-25 students), or a regular class with a full-time teacher's aide. Students remained in the same type of class through 3rd grade.

The study was conducted by the state department of education with the assistance of a consortium of four universities: Memphis State, Tennessee State, Vanderbilt, and the University of Tennessee-Knoxville.

In kindergarten, students in small classes scored six points higher in reading and eight points higher in math on standardized achievement tests than those in the regular-sized classes; they had a slightly higher pass rate on basic-skills tests. By the end of 1st grade, the small-class achievement gap widened to 11 points in reading and 12 points in math on the Stanford Achievement Test—a difference that experts say is "large and educationally important, not just statistically significant." According to the report on the first two years of the study released by the Tennessee Department of Education, the gain is roughly equivalent to about a two-month difference in achievement. By the end of 1st grade, the regular classes with a teacher's aide were only slightly ahead of the regular classes without an aide.

These academic leaps by reduced-size classes held true in urban, suburban, rural, and inner-city districts; for all races; for both poor and affluent students; and for both girls and boys. But the effects of small classes were especially strong in inner-city schools with large minority enrollments. There, for example, the pass rate for minority children on curriculum-based mathematics and reading tests came close to that for white children.

Results on 2nd graders' performance, which were released in November, show that students in small classes have maintained their academic gains. Data from the last year of the study, when the children were in 3rd grade, are being analyzed and are expected to be released in early 1990.

One truly remarkable aspect of the project is that the initial findings have been quickly translated into policy. Soon after the release of the results from the first two years of the study, Tennessee Gov. Ned McWherter announced that $2.8 million of state money and $1.3 million in federal Chapter 1 funds would be pumped into 44 elementary schools to reduce class sizes. Allocation of the state funds closely mirrors the research results: The money pays for 15-student kindergarten-through-3rd grade classes in schools where at least 60 percent of the enrollment comes from families whose economic status makes pupils eligible for free or reduced-price lunches.

The class-size findings may have surprised policymakers, but not teachers. What surprised teachers, according to Project Director Elizabeth Word, was that the benefits of smaller classes were ever in question. Says Word: "When I went across the state, teachers asked me: 'Why in the world is the state of Tennessee spending $12 million to study something that we already know the answer to?' I had to

tell them, 'You are a teacher, and you know, but the legislators aren't educators—they just want to get their own answers.' "

Even though lowering class size makes intuitive sense, the issue has long been a source of controversy. Project STAR's initial conclusions come less than two years after a U.S. Education Department report asserted that reducing class size is "the most costly and most primitive" method of enhancing student achievement. The 44-page paper, based on analysis of a number of previous studies, pointed out that from 1961 to 1986, the median class size in elementary schools dropped from 30 to 24 students. But over the same two decades, the document said, student achievement—as measured by standardized-test scores—also showed a steady decline.

Still, the Tennessee study and the U.S. Education Department analysis are not totally contradictory. Although the federal report raised serious second thoughts about the economic and academic effectiveness of smaller classes, it did acknowledge that class sizes would have to drop sharply below their current levels—to no more that 15 pupils each—before researchers would see significant improvement in student achievement.

Project STAR researchers had set out to find out more about the 15-student threshold, and they made sure they designed the study so that the findings would be unquestionable.

Jeremy Finn, a State University of New York researcher, was called in to consult on research and statistical matters and to review the design of the study. Although he found the design to be "exemplary," he doubted the project would turn up much evidence supporting smaller classes. "I started as a skeptic," he says. "But each year it got better. I kept saying 'This can't be. This can't be.' "

Because every school involved in the project had at least one of each kind of class—one small class, one regular-sized class, and one regular class with a teacher's aide—the results weren't skewed by differences between schools. He says that the "in-school" design, as well as the sheer size of the study and the random assignment of both students and teachers, made Project STAR "far and away the best true experiment" that has ever been done on the class-size issue.

"They did everything right," he says. "Anything that anybody ever said you should do in an education experiment was done correctly here."

Although the study is officially over—Project STAR is out of the classroom now, and only results from the 3rd grade are yet to be released—some people are still watching the 4th graders with interest. Driven by curiosity, Finn is involved in a follow-up study with the state department of education, monitoring the students to find out if the gains from small classes will be maintained as they grow older and return to regular-sized classes.

A major question still to be answered is what specific aspects of the small classes make a difference. Project STAR teachers who were interviewed say that in small classes they can make sure all students master the curriculum; they say they know their students better, and feel confident that "no one is falling through the cracks." They also claim to have more time to provide immediate remedial help when students seem to be having problems.

Helen Bain, who was instrumental in getting Project STAR funded, says the impetus to reduce class size in the elementary grades was a long time coming. Bain, past president of National Education Association and a researcher at Tennessee State, remembers teaching English to high school students who could not read. "I was constantly fighting their lack of self-confidence, and what failing over and over had done to them," she recounts. "I pushed for Project STAR because it is just like building a house—if you don't have a firm foundation, something like [hurricane] Hugo is going to blow it all way."

She says she and her fellow teachers knew that reducing class size would help children build that strong academic foundation. "For years, people have said to us, 'You can't prove it,' " Bain says. "Every time they don't want to put money into reducing class size, they say, 'You can't prove it.' But now, we have proven it. At last, we have results that no school board or legislature can put down." □

—Elizabeth Schulz

Project Star

First Grade

Final Report

(1986-87)

Elizabeth Word, Director
Charles Achilles
Helen Bain
John Folger
Jeremy Finn
John Johnston
Nan Lintz

April 1989

Project STAR First Grade Results

- Reactor at National Convention praised Project STAR's design and integrity and called it a "watershed event" in research.
- An external consultant to the project made the statement, "This research leaves no doubt that small classes have an advantage over larger classes in reading and math in the early primary grades."
- Project STAR is in the last year of a four year study.
- This report deals with results from the second year when students were in first grade.
- Results are based primarily on test scores from the Basic Skills First and Stanford Primary I.
- At the end of first grade, small classes were approximately two months ahead of regular classes in reading and math in all locations, urban, suburban, rural and inner-city 100% of the time.
- At the end of first grade regular classes with full time teacher aide were approximately one month ahead of regular classes in reading and math.
- Small classes scored 11 points higher in reading and 12 points higher in math than regular classes on the Stanford Primary I.
- Minority students in small classes scored 17.4% higher than minority students in regular classes in reading on the Basic Skills First.
- This suggests that small classes are very beneficial to minority students.
- There is no significant differences in attendance and self-concept of students in small classes as compared to students in regular classes.
- Teachers prefer small class conditions, spend more time with individual students in small classes, and can work more thoroughly with students in small classes.
- Students in inner-city schools scored lower on both Stanford Primary I and Basic Skills First tests than students in urban, suburban or rural schools.
- Several secondary studies are continuing in order to clarify what other factors influence achievement other than test scores.

EXECUTIVE SUMMARY: PROJECT STAR

FIRST-GRADE RESULTS

Project STAR (Student Teacher Achievement Ratio) has achieved considerable national publicity and attention. A reactor at a recent national convention called STAR a "watershed" event in research in education and praised the study's design and integrity.

Project STAR is a longitudinal class-size experiment to study the effects of a reduced class size (approximately one teacher and 15 students, or 1:15) on the achievement and development of students in kindergarten through grade three. In its second full year, Project STAR students were in first grade. The kindergarten report provides considerable background information regarding the study; this report provides the outcomes of grade-one.

The project included 76 schools from all sections of Tennessee in four types of settings: rural, urban, suburban, and inner city. There were 346 classes and approximately 6950 students involved in the first grade. To help control for differences between students and teachers, students and teachers were randomly assigned to classes in schools. The project utilizes a within-school design so there is at least one small class, one regular class (the control) and one regular class with a full-time teacher aide in each school. Larger schools have more classes to keep within the size limits specified for each type of class, small classes are 13-17; regular, and regular with aide classes are 22-25 students.

Students were tested in the regularly scheduled time for state testing (last week of March, first week of April) with the Stanford Achievement

Test, Primary One, and with a specially developed criterion referenced test of basic skill objectives in reading and math. Students also completed the Self-Concept and Academic Motivation Inventory (SCAMIN) in February. Attendance records were kept on all students, and information was obtained on students' race, sex, a socioeconomic measure, and students' special education status. (Students with handicapping conditions were not included in the analysis). Extensive information was also collected about the teachers and about teaching conditions that might have influenced the results.

Results

At the end of kindergarten, students in small classes were ahead of students in regular classes by approximately one month in both math and reading achievement scores. Students in the classes with a full time teacher aide were only a little ahead (one percentile point) in reading and had the same achievement scores in math. There was a statistically significant achievement gain for students in the small classes, but not for students in the classes with full time teacher aides. (See Table 1.1.) Results of the first-grade analysis, however, provide a much clearer picture of the small-class advantages.

The initial study design was followed in the second year, and the results from the second year of the study are substantial enough that an external consultant to Project STAR was able to say, "This research leaves no doubt that small classes have an advantage over larger classes in reading and mathematics in the early primary grades." In the same paper the researcher also stated, "This experiment yields an unambiguous answer to the question of the existence of a class-size effect, as well as estimates of the magnitude of the effect for early primary grades." These are strong words for research in education, and are possibly due to the design and power of Tennessee's Project STAR.

At the end of the second year, Project STAR students in small classes were outperforming pupils in larger classes by substantial (statistically and educationally significant) margins on standardized tests, and also on the state's Basic Skills First (BSF) tests of reading and math. This superior performance by pupils in small classes was evident in all locations (rural, suburban, urban, and inner city schools), and for pupils of different races and of both sexes.

Results for grade one in Project STAR are more definitive than results found in other class-size studies. This is most important because of STAR's superior design which has paid considerable attention to maintaining the required research standards and controls.

At the end of first grade, small class students were approximately two months ahead of students in regular classes in both reading and math (first grade Stanford Achievement Test). Small class students scored at the 64th percentile in reading and the 59th percentile in math at the end of the first grade, while students in regular classes scored at the 53rd percentile in reading (11 points lower) and at the 47th percentile in math (12 points lower). Using the class as a unit, the "effect size" for both exceeds .6, where .3 is considered large and educationally important, not just statistically significant.

On the BSF tests, which measure achievement of specific objectives related to the curriculum, the class effect sizes were approximately .5

for reading and .3 for math, both favoring the small over the regular classes. On the BSF Reading, minority students in small classes scored 65.4, compared to 48.0 in regular classes. White students in small classes scored 69.5, compared to 62.3 in regular classes. In BSF Reading results, minority students in small classes scored nearly the same as white students in small classes, but considerably higher than minority students in regular classes (a gain of 17.4), and slightly higher than white students in regular classes (3.1). The large difference between scores of minority students in small and in regular classes suggests that on concepts taught through the Basic Skills curriculum and measured by the BSF tests, the small class settings are very beneficial to the minority youth.

TABLE A

Average Percent of First Grade Students Passing BSF Reading

Race	Small	Reg.	Difference Small Class Advantage (Sm. - Reg.)
Black	65.4	48.0	17.4
White	69.5	62.3	7.2

In the first grade, students in regular classes with a full time teacher aide (RA) also outperformed students in regular classes in both reading and math. At the end of first grade, students in RA classes were approximately one month ahead of students in the regular classes in reading and slightly less than a month ahead in math.

The presence of a teacher aide in grade one seems to have some benefit on student achievement, but not as much as the small-class condition.

Interviews with teachers reveal that teachers: 1) prefer the small class condition, 2) spend more time with individual students in small classes, and 3) can work more thoroughly with students in the small classes.

The small class and the regular with full time teacher aide classes had achievement gains which were similar in magnitude from kindergarten to first grade.

TABLE B

Scaled Score Gains* from Kindergarten to First Grade

	Small	Reg	R/A
Total Reading	89	78	85
Total Math	48	42	47

*Reading and math are on different scales and cannot be compared with each other on scale scores, which are designed to measure year-to-year growth. The gain scores are computed by subtracting the kindergarten score from the first grade score.

The pattern of scores on the various subtests of the Stanford Test (word reading, listening, sounds and letters, etc.) was very similar to the total reading and math scores reported above; small class students had the highest scores, students in regular with full time teacher aide classes were in the middle, and regular class students had the lowest scores.

School Type and Achievement

Students in inner-city schools scored significantly lower on both Stanford math and reading tests and basic skills criterion tests in reading and math, than did students in rural, urban, or suburban schools. Inner-city schools were characterized by having high proportions of black and low socioeconomic background children. Inner-city schools had lower achievement even after controlling (statistically) for students' race and SES. The achievement scores of students in schools in the other three environments (rural, urban, and suburban) was similar.

In all four types of schools small class students outperformed regular class students (differences were statistically significant) in reading and math. In rural schools regular with full time teacher aide classes (RA) were significantly better than regular classes in both reading and math, but there was no significant difference between the two in all other school types.

Class Size, Socioeconomic Status and Race

Black students and low socioeconomic students in small classes scored higher on all tests of reading and math than their counterparts in regular classes. In inner-city schools small classes helped blacks more than whites, but there were very few whites in these schools. In other types of schools blacks and whites both made higher scores in small as compared to regular classes. Small classes seemed to help high SES students more than low SES students on the Stanford Achievement Test in reading and math, except in inner-city schools where there are relatively few white students. The large deficits in the Stanford Achievement scores of these "at risk", low SES students were even larger at the end of first grade.

Attendance and Self-Concept

Attendance rates were between 95 and 96 percent in all types of classes; being in a small class or having a full time teacher aide did not increase attendance in either kindergarten or first grade.

Self-concept was not any higher for students in small classes or regular with full time teacher aide classes than students in regular classes. Because self-concept is difficult to assess with a group test with young children, this conclusion is tentative.

Summary

Both small classes and a full time teacher aide helped the achievement scores of students in the first grade. By the end of first grade small class students were almost two months ahead of regular class students in reading and math. Since small classes were a month ahead at the end of kindergarten, the first grade effect was about a month's gain.

The small class advantage occurs in schools in all settings: rural, urban, suburban, and inner city. It also occurs for blacks as well as whites, both high and low socioeconomic students about equally, and for both boys and girls about equally.

In first grade, unlike kindergarten, classes with a full time teacher aide also did significantly better than regular classes on most achievement measures, and were in an intermediate position between small classes and regular classes in achievement. Self-concept and attendance were not affected by a small class or a full time teacher aide.

Researchers will continue to analyze the STAR data, including data that will help identify the cumulative effects of class size. Researchers are also studying the content of teacher logs, questionnaires about grouping, etc. to help understand what goes on in classrooms. Several secondary studies are helping researchers understand the impact of such things as training and the use of a teacher aide on student achievement and development. Results from these studies are not complete at the current time and will be reported later.

PROJECT STAR

NARRATIVE EXECUTIVE SUMMARY FOR SECOND GRADE

(1987-1988)

Elizabeth Word, Director

Helen Bain

John Folger

John Johnston

Nan Lintz

October 1989

Project STAR Office
Tennessee State Department of Education
Cordell Hull Building
Nashville, TN 37219

FORWARD

The following report covers the third year of the four-year study of class size and the use of teacher aides that was mandated by the Tennessee Legislature. Although references are made to kindergarten and first grade results, the main purpose is the reporting of second grade results. Third grade results as well as final longitudinal results will be presented at a later date.

The project is directed by Elizabeth Word for the Tennessee Department of Education, but it has been a group effort of the Department and a consortium of four universities, Memphis State University, Tennessee State University, the University of Tennessee, Knoxville, and Vanderbilt University. The data collection and analysis is the responsibility of the universities. In addition the Department has contracted with Jeremy Finn of the State University of New York, Buffalo to analyze the first, second, and third grade data and provide a technical analytic report.

The project has received excellent cooperation from the seventy-five participating schools and the more than 1,300 teachers who have furnished a great deal of information and done extra testing in response to the multiple demands of the research staff. Without the assistance and full cooperation of the teachers and principals of the STAR schools, this project would have been impossible.

The questionnaires and other data collection instruments were processed, and data tapes were prepared for analysis by Jayne Zaharias and DeWayne Fulton of Tennessee State University. They have spent a great deal of time on this complex task which included tracking over 7,000 students.

This report is based on the analyses done by Jeremy Finn, State University of New York, Buffalo, John Johnston, Memphis State University, and John Folger and Carolyn Breda at Vanderbilt University. Many people have contributed to this project and their work is greatly appreciated.

EXECUTIVE SUMMARY

Background

This is a report on the third year of Project STAR (Student Teacher Achievement Ratio) when the children were in second grade. Project STAR is the largest and best designed longitudinal study of class size that has been done. It involves 75 schools, 340 teachers, and more than 6,700 second grade students from all parts of Tennessee including rural, urban, suburban, and inner-city schools.

All students and teachers were randomly assigned to one of three class types in each school, a small class (13 - 17 students), a regular class (22 - 25 students), or a regular class with a full-time aide (22 - 25 students). The regular classes served as a control group, small and regular with a full-time aide classes' achievement was compared with achievement in the regular class. The within-school design controlled for the substantial variation between schools.

Prior Years Results

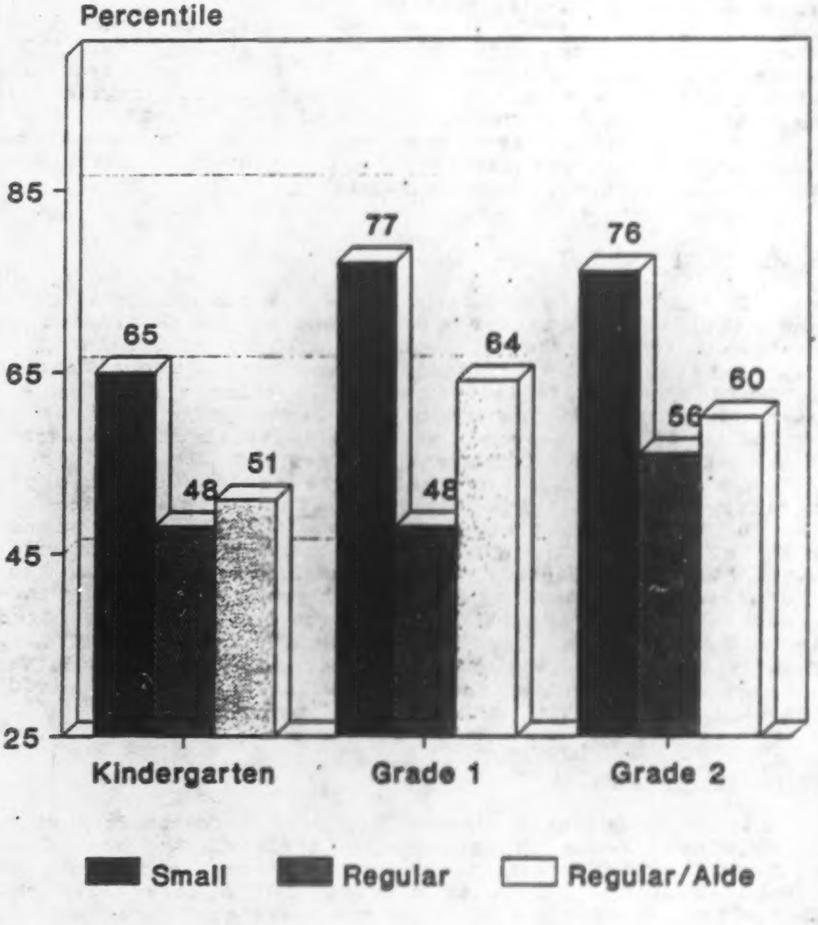
In kindergarten and first grade, students in small classes had significantly higher achievement on total reading, total math, and total listening tests as well as on each of the subtests that make up the total reading test. The difference in favor of the small class was equal to about a month in kindergarten and an additional month in first grade, so that at the beginning of second grade, students in small classes were about two months ahead of students in regular classes in reading, math, and listening. The small class differences are statistically significant, and educationally important. Students in regular with aide classes were consistently ahead of regular class students at the end of first grade in all three subjects, about half the advantage that the small class students had, but the difference was not statistically significant. In terms of effect size they are in the moderate range with an effect of about 0.25. (Effect size is a measure that researchers use to compare the size of various program effects. It is the difference between the small class and the regular control class divided by the standard deviation of the control group.)

Second Grade Results

Students in small classes continued to outperform students in regular classes on achievement tests in the second grade. Students in regular classes with a full-time aide also outperformed students in regular classes, but by a smaller amount. This effect was found for all of the tests that were used. There was a significant advantage for the small class students on Stanford Achievement Tests in Total Reading, Total Math, and Word Study Skills, and a similar advantage on the Tennessee Basic Skills Criterion Tests in Reading and Math. See Figures 1-5.

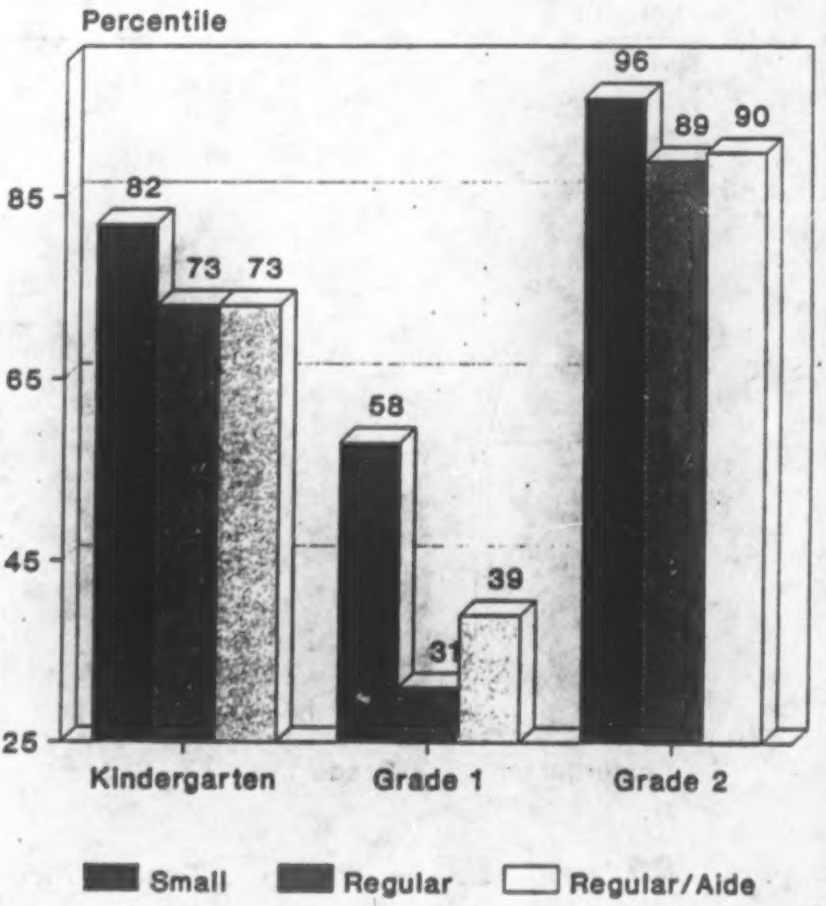
FIGURE 1

Average Performance of Project S•T•A•R Students on Stanford Total Reading Test by Grade and Class Type



Utilizing Large Group Norms

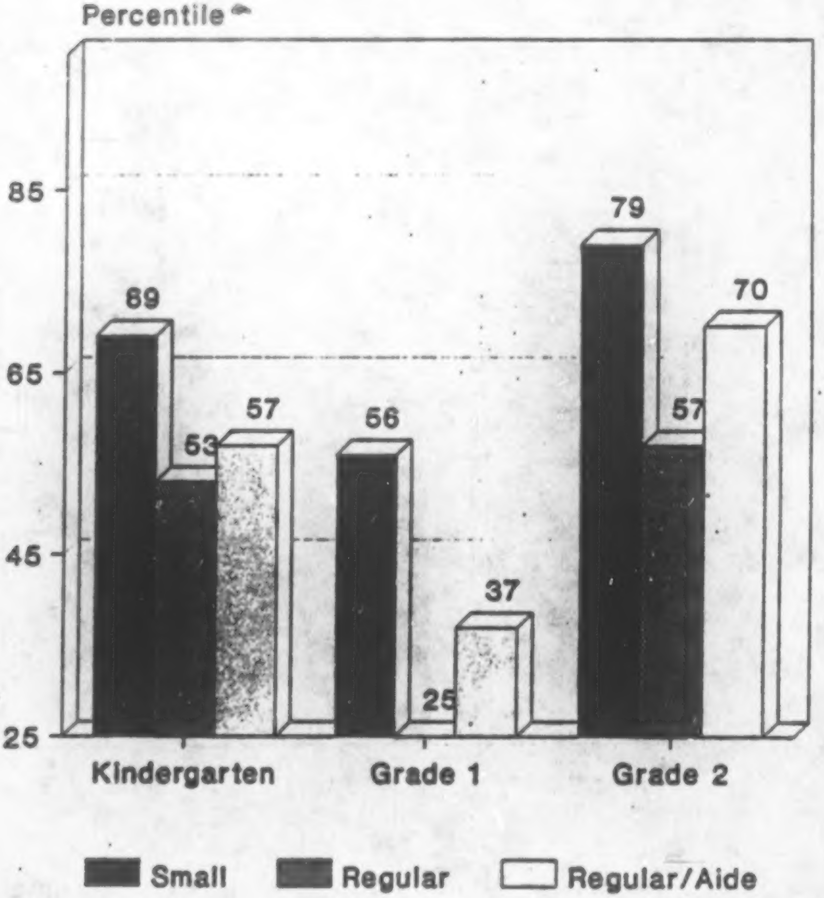
FIGURE 2



Utilizing Large Group Norms

FIGURE 3

Average Performance of Project S•T•A•R
Students on Stanford Word Study Test
by Grade and Class Type



Utilizing Large Group Norms

FIGURE 4

Mean Percent of Reading Skills Mastered
on 2nd Grade Basic Skills First Test
by Class Type for Project S•T•A•R

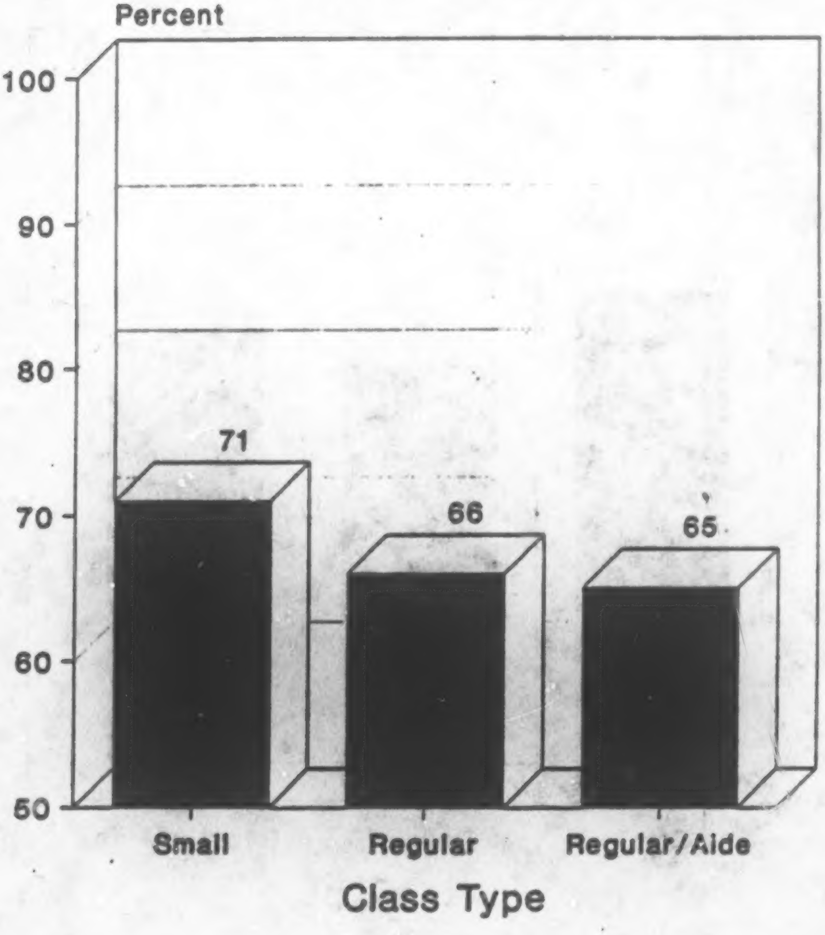
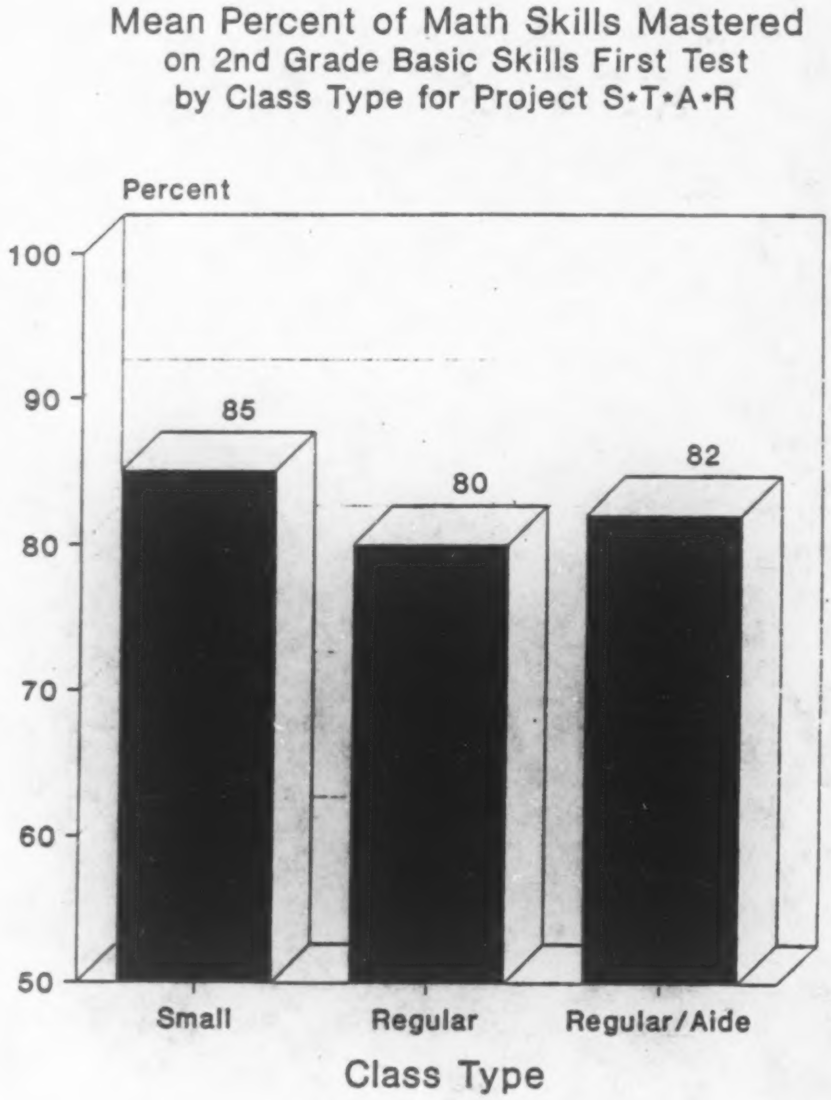


FIGURE 5


Mean Percent of Math Skills Mastered
on 2nd Grade Basic Skills First Test
by Class Type for Project S•T•A•R
Percent
100
90
80
70
60
50
85
80
82
Small
Regular
Regular/Aide
Class Type

Students in small classes maintained, but did not increase their two-month advantage over students in regular classes. Students in regular classes with a full time aide maintained a small advantage over those in regular classes, but did not increase it. No additional small class or aide effect was found on STAR measures in second grade. Average score increases on the Stanford Achievement Tests were computed by subtracting the scores at the end of first grade from the scores at the end of second grade to get a measure of growth in the second grade. As shown in Table A there are no significant differences between the class average score increase made by students in small, regular, or regular with a full-time aide classes.

TABLE A
Average Score Increase on Stanford Achievement Tests
From First Grade to Second Grade by Class Type
Project STAR 1988-89

	Total Reading	Total Math
Small Class	57	46
Regular Class	57	43
Regular with Aide Class	59	48

Teachers reported the same kinds of advantages of a small class (or the use of a teacher aide) on the second grade year-end interviews that the first grade teachers reported the previous year. The main advantages were that they could spend more time on instruction with a small class, and they needed less time for transitions. The aide class teachers also reported they could spend more time on instruction because their aides did much of the routine and clerical work. Teachers in both small and aide classes in the second grade reported that they could do more individualized instruction to meet student needs than could teachers with regular-size classes.

Class Size and School Type in the Second Grade

The small class advantage occurs in all four school types-inner city, suburban, urban, and rural. In each of the school types the small class was ahead by about the same amount throughout the project. Students in the inner-city schools have had substantially lower achievement scores than students in the other three school types, and this difference persisted in the second grade. However, inner-city students made up some of their deficit in reading, as shown by the larger gains reported in Table B.

TABLE B
Average Score Increase on Stanford Achievement Tests From First Grade to Second Grade by School Type Project STAR 1988-89

	Total Reading	Total Math
Inner City	63*	47*
Suburban	56	43
Urban	57	42
Rural	55	47*

* Significantly different from suburban gain scores.

Other Findings

1) As in kindergarten and first grade, there were no second grade differences between class types in academic motivation or academic self-concept.

2) Students on free lunch programs and those not on free lunch programs were helped about the same by a small class and by a regular class with a full-time aide. The free lunch students were about as far behind the non-free lunch students at the end of second grade (about a half a grade) as they had been at the end of first grade in math and listening. Free Lunch students did have about a five-point greater gain than non-free lunch students in reading, so they closed a little of the thirty-point gap.

3) A three day training program with five follow-up sessions which was initiated in the second grade was given positive ratings by the teachers, but it did not lead most of them to modify their teaching in ways that affected student test scores. Teacher inservice training made no significant difference in student achievement in reading or math.

TABLE C
Average Score Increase on Stanford Achievement Tests From First Grade to Second Grade by STAR Teacher Training Project STAR 1988-89

	Total Reading	Total Math
STAR Trained Teacher	59	47
Not Star Trained Teacher	57	46

Conclusions

- Second grade inner-city students made the greatest gains in reading.
- Free lunch students made a greater gain in reading than non-free lunch students.
- Small class students outperformed students in regular classes and regular classes with a full-time aide.
- Small class students maintained, but did not increase, their achievement gains made in kindergarten and first grade.

So I thank all of you for being an attentive, patient group of witnesses and observers and I will declare this hearing adjourned.

[Whereupon, at 12:20 p.m., the subcommittee adjourned, subject to the call of the Chair.]

EXCELLENCE IN TEACHING ACT

THURSDAY, FEBRUARY 22, 1990

U.S. Senate,
Subcommittee on Education, Arts and Humanities, of the
Committee on Labor and Human Resources,
Washington, DC.

The subcommittee met, pursuant to notice, at 10 a.m., in room SD-430, Dirksen Senate Office Building, Senator Claiborne Pell (chairman of the subcommittee) presiding.

Present: Senators Pell, Simon, Kassebaum, and Cochran.

Opening Statement of Senator Pell

Senator **Pell**. The Subcommittee on Education, Arts and Humanities will come to order.

Today's hearing is the fourth in a series of five hearings being held by Senator Kennedy and myself on the subject of teacher education.

The legislation we have before us, S. 1676, the National Teacher Act, and S. 1675, the Excellence in Teaching Act, have very similar purposes. First, it is our goal to attract the best and the brightest of our young people into the teaching profession. Second, we hope to upgrade and retain those talented teachers already in the profession. Finally, we hope to expand the number of minorities in the teaching profession so that all of our Nation's students will have positive role models.

Today's hearing will focus on three areas. Our first panel will tell us of several innovative projects taking place in the public schools and give us an overview of teachers' attitudes and perspectives on a number of issues concerning their profession.

The second panel will focus on Title IV of my legislation, the New Careers for Teachers program. The crisis we have in attracting minority candidates to the teaching profession promises to worsen in the next decade. Today, only 6.9 percent of all teachers are black, yet blacks make up 18 percent, or more than twice the percentage, of our Nation's student body. This ratio is expected to change dramatically over the next decade as the percent of black teachers drops to 5 percent while the number of black students rises to one-third of the total school population.

Similar trends are predicted among other minority groups. New Careers is an innovative program with a proven record of attracting more minorities into teaching. We will hear this success story today.

Finally, panel 3 will focus on the importance of maintaining access to college if we are to meet the challenge of the impending teacher shortage. We will hear comments on my proposal to provide student loan forgiveness to new teachers and the importance of the TRIO programs in keeping the college pipeline open to all.

I welcome all of today's witnesses and look forward to a very substantive hearing.

Our first witnesses today will be Ms. Wendy Aronoff, a teacher at Hope High School in my own home state of Rhode Island; Ms. Maxine Duster, project director of the Science/Mathematics Advocacy and Recruitment for Teachers Program of the Chicago Urban League, and Dr. Sibyl Jacobson, president and CEO, Metropolitan Life Foundation and vice president, Metropolitan Life Insurance Company.

I believe the witnesses today have all been informed that we'd like to limit the testimony to 5 minutes. Your entire statements will appear in full in the record as if delivered orally, and that will give us an opportunity to ask questions, which I think is very important with a subject as important as this.

We'll start out with Ms. Wendy Aronoff, who I welcome, from Providence. I wish you well and look forward to hearing from you.

STATEMENTS OF WENDY ARONOFF, TEACHER, HOPE HIGH SCHOOL, PROVIDENCE, RI, REPRESENTING COALITION OF ESSENTIAL SCHOOLS; MAXINE DUSTER, PROJECT DIRECTOR, SCIENCE/MATHEMATICS ADVOCACY AND RECRUITMENT FOR TEACHERS PROGRAM, CHICAGO URBAN LEAGUE, CHICAGO, IL; AND DR. SIBYL C. JACOBSON, PRESIDENT AND CEO, METROPOLITAN LIFE FOUNDATION, AND VICE PRESIDENT, METROPOLITAN LIFE INSURANCE COMPANY, NEW YORK, NY.

Ms. **Aronoff**. Thank you for inviting me here. Especially, being from Rhode Island, it feels good.

The National Teacher Act of 1989 and the Excellence in Teaching Act both recognize the need for professional growth. If those of us already in the teaching profession are to make necessary changes, we must have a choice, a vote, a voice.

Those of you in a position to do so must not merely react to this national urgency, but respond with compensated time and then with the working conditions and materials which support innovation. Ultimately, respect must be given to teachers who take risks.

Teachers must become institutionally empowered so we are invested enough to shift the power of learning to our students. We have done this at Hope Essential High School in Providence, RI, where we have 260 students. Hope Essential is a school-within-a-school. It reflects the larger school of 900 and also reflects the city and the community, which is richly diverse, racially and ethnically, and which has all of the problems most of our poor cities and towns face today. And it is perhaps not so ironically a few short blocks from Brown University, which has an historically elitist and high tuition reputation.

Through the Coalition of Essential Schools and its Education Department, Brown University has been very important as we at Hope High School entered into school reform.

As I said, we have shifted the power of learning from teachers to student. Our classrooms are no longer teacher-centered, but collaborative environments, where the student is the worker, the researcher, the writer, the experimenter, the investigator, the reporter, the asker of questions, and therefore the learner. Our classrooms are environments of activity, not passivity, and as a teacher, nothing can be more exciting.

Traditionally, education majors take three separate courses: Evaluation, methods of instruction, and curriculum. We in theory and in practice make the three a whole. With urgings from the Coalition of Essential Schools, we have course exhibitions. Students are not merely tested and drilled, but must exhibit mastery.

The challenge is not in the surprise of the trick question on the test, but the challenge is in knowing the exhibition ahead of time and learning the skills and the concepts necessary to exhibit mastery.

The students' performances are the epitome of theory and practice. If we expect students to exhibit mastery, we must change our approach to curriculum and change our teaching strategies. In planning lessons, we ask not "What will I do today?" but "What will my students do to prepare for their exhibition? What is essential?"

For me, the relationship between student and teacher, and student and student, is forever changed. In order to be successful, we have tried to lower class size and have had to work very closely together, teachers with teachers during planning meetings, teacher with students, with the teacher as coach, and students with students in small groups.

We are making a concerted effort to develop a sense of community which includes our students' families. One of my students, Wayne Newson, recently best summed up our efforts. He said, "The challenge of Hope Essential has taught me to trust myself and to trust others, and it has given me the confidence to try."

I just wanted to add that this year's graduating class has about 26 students in it—this is from the school-within-a-school—and two of them want to be daycare workers, two of them want to be elementary school teachers, and two want to be high school teachers. I think that a lot of that is the result of the kind of program that they have been in during their high school years.

Senator **Pell**. Thank you very much indeed.

Ms. Duster.

Ms. **Duster**. Thank you, Chairman Pell and members of the committee. My name is Maxine Duster, and I am director of the Science/Mathematics program at the Chicago Urban League.

The Chicago Urban League was founded in 1916 and is Chicago's oldest and largest agency dedicated to racial and social justice. The League's mission is to eliminate racial discrimination and segregation and to work for the achievement of equal opportunity and parity for blacks and other minorities in every phase of American life.

I am pleased to appear before you on behalf of James W. Compton, president and CEO of the Chicago Urban League.

For many years, the Chicago Urban League has been involved with efforts to enrich the learning experiences of Chicago public school students and has spearheaded and supported advocacy activities for quality education.

The League's history also includes working to restore equity in Chicago's public schools, and we are familiar with high dropout rates, funding gaps, low achievement scores and other problems which may be contributing factors to the growing teacher shortage.

Many recent reports have indicated that these factors often begin as early as the primary grades when teachers show their own lack of interest in preparation, especially in math and science.

As students move into the high school years, many, and particularly minority students are often tracked into lower-level courses which neither motivate nor prepare them for careers in math and science.

Even more tragic is the reality that the precious few who enter teaching careers do not often experience positive results and rewards in a profession from which all others must grow. More than 20 percent leave the profession after the first year. The cause of this troubling trend toward departure is not new. Perhaps I serve as an example of a teacher who left the profession more than 12 years ago for many of the same reasons that deter talented young people today.

In 1989, out of our concern for the growing shortage of minority teachers, and more specifically for the alarming shortage of minority science and mathematics teachers, the League initiated a Science, Mathematics, Advocacy and Recruitment for Teaching, known as the SMART Program, which is housed in the Urban League's Education Department and directed by a full-time professional staff and a part-time support staff person.

With funding from the Chicago Community Trust's Elementary and Secondary Education in Chicago Grant Program, the League in partnership with Northwestern University recently completed a one-year planning phase for the SMART program in which a four-year science/math program was developed. The principal components of the program are student support and teaching career advocacy.

The student support component will consist of an individualized talent development plan for each of the students enrolled in the program. Fifty students will be enrolled in the first year, and 25 will be added each year for the four-year program. Participants will begin the program in their freshman year of high school and will conclude their involvement upon graduation. Activities for each student will vary, but may include tutoring, cultural and academic enrichment programs, cooperative learning initiatives, and linkages with mentors and community educational institutions.

The teaching career advocacy component for which the League is responsible will include all activities related to the coordination and support of an advocacy group recently formed to address issues of recruitment, training and retention of minority students into the teaching profession.

More specifically, the advocacy group, composed of key professionals, community leaders, parents and students, will focus on four primary areas: the low prestige of teaching as a profession; poor orientation of African-American students toward careers in teaching; limited financial resources for college tuition, and inadequate academic preparation, especially in math and science.

In an effort to affect the changes that appear more critical to the development of an adequate pool of highly-qualified minority students for the teaching profession, the advocacy group will examine strategies for combating the problems that have been successfully instituted in locales similar to Chicago. Moreover, new strategies to fit the circumstances unique to Chicago's student population and to target those organizations and institutions that have the power to change existing policies and procedures will be created.

For example, it is anticipated that advocacy activities aimed at addressing the issue of low prestige of the teaching profession would need to be directed toward the Illinois General Assembly, which has primary responsibility for funding schools. Action agendas that will result in more adequate salaries, school facilities, class size and teacher preparation will also have to be devised. Additionally, special funding for support of scholarship programs for students interested in teaching needs to be in place.

The advocacy group will also be responsible for the development of appropriate networks that will bring together representatives of business and cultural institutions, scientists and mathematicians who demonstrate sensitivity to the needs of students to act as big brothers and sisters and serve as examples of success through education.

Evaluation procedures for both components will be established. Advocacy activities, such as increased media attention to the teaching profession, legislation, policy changes by local public schools or institutions of higher education, and linkages with other organizations working toward the same objectives will be monitored for effectiveness.

Visible changes in student attitudes, enrollment in more difficult math and science courses, increased school attendance and improved grades, greater interest in the teaching profession, and continuous contact with mentors will be evaluated to determine the success of the student support component.

While we recognize that the SMART program is but one example of an effort to address the shortage of minority math and science teachers, we are hopeful it can serve as a model for others to follow.

We stand ready to work collaboratively with others and to offer you our assistance wherever possible.

Proposed legislation to create and support programs that provide assistance to those who demonstrate an interest in careers in teaching is strongly urged. And perhaps more importantly, the critical shortage of minority teachers demands that provisions be made for recruitment, retention and training of talented individuals from those affected communities.

Thank you again for the opportunity to appear before you, and I congratulate you and Senator Paul Simon for your leadership in these efforts.

Senator PELL. Thank you very much.

Senator Simon.

Senator SIMON. Mr. Chairman, unfortunately, we are marking up in the Judiciary Committee, two floors below, and I'm going to have to head right back down there. I simply wanted to join in welcoming Ms. Duster, and to say that the Chicago Urban League really has an excellent program working with Northwestern University. If the present trends are unchanged, a decade from now, one-third of the student enrollment will be minority enrollment, but only 5 percent of the teachers will be minority teachers. That clearly is not a healthy thing, and I hope we can change those trends.

I applaud you, Mr. Chairman, for holding the hearing. I would like to enter a statement in the record, and I regret I am going to have to head back down and take care of the Judiciary Committee mark-up.

Senator PELL. Thank you very much for coming for this even brief visit. I appreciate your interest very much, and your statement will be included in full in the record.

Senator SIMON. Thank you, Mr. Chairman.

[The prepared statement of Senator Simon follows:]

PREPARED STATEMENT OF SENATOR SIMON

Senator SIMON. Mr. Chairman, I would like to welcome before the subcommittee Maxine Duster, director of the science-mathematics program at the Chicago Urban League. The League, in partnership with Northwestern University, has developed precisely the type of teacher recruitment program that the Federal Government needs to encourage.

Only a few high school-based teaching programs exist across the country. The most studied effort is the Teacher Cadet Program, a one-year program for juniors and seniors, run by the South Carolina Center for Teacher Recruitment. An independent report found the program to be very effective: It "not only attracts bright young people to teaching but also uplifts the image of teaching in the eyes of those who will and will not teach."

Whether or not it's part of an explicit teacher recruitment effort, involving students in teaching is an effective way of improving their learning. According to the Carnegie Forum on Education and the Economy:

> "One-to-one tutoring is an exceptionally effective teaching method. With a trained tutor, an astonishing 98 percent of students academically outperform those who are taught in conventional classrooms with one teacher to 30 students."

And the tutors often benefit even more than the tutees. My staff recently visited the Teaching Professions Program at Coolidge High School here in Washington, DC. There, after an introductory course, students "adopt" a student in a nearby elementary school or childcare center and work with the teacher in the classroom for a few hours a week. Immediately after starting their teaching experience, their own interest in learning was invigorated, and absenteeism was reduced. Even if none of them go into teaching, just the enthusiasm about school and learning engendered by the program makes it worth the effort.

Fortunately, many students who do have the teaching experience do become interested in teaching as a career. As one student in the

South Carolina program said, "I was able to test-drive my career, and I decided that I want to spend my life in the teaching profession."

Unfortunately, this type of success is most difficult to achieve among blacks. Of the 974 participants in the Teacher Cadet program last year, it was the black males who were least likely to intend to teach, even after the program:

—". . . those who were more likely to initially choose teaching and continued to want to teach at the end of the [program] were white females. And, those who were more likely to never intend to teach were black males."

—". . . black Cadets—when compared to their white counterparts—reported more career concerns about independence, salary, opportunities for advancement, job security and a flexible daily schedule."

—". . . black Cadets were more likely to assert that they had been discouraged by teachers from choosing teaching as a career."

These findings point to the need for long-term, comprehensive teacher recruitment programs focused on minority youth. That is exactly the type of program that the Chicago Urban League has developed, and we can thank the Chicago Community Trust for funding the program.

But that's only 100 students, and they won't be out of school for a decade. We need hundreds of thousands of minorities to go into teaching. We have the opportunity, with the legislation before this subcommittee, to provide Federal encouragement and assistance in replicating the League's program across the country.

I would like to thank you, Mr. Chairman, for holding this hearing and giving us the opportunity to hear about the Chicago Urban League's "SMART" program.

Senator Pell. Dr. Jacobson.

Dr. Jacobson. Thank you, Senator, for the opportunity to present some of the key findings of Metropolitan Life's survey of the American teacher. Begun in 1984, we commissioned Louis Harris and Associates to poll the attitudes of a national sampling of teachers. The purpose was to add the voice of the teacher to the national debate over school improvement and reform.

Since my submitted testimony is full of statistics, I would just like to mention some brief and broad strokes and keep the numbers to a minimum.

First, some good news. The professional status of teachers has improved over the last 5 years, teachers tell us. For the first time, a majority of teachers say they feel respected in today's society. That was not so in 1984 when we conducted the first survey. And most now would advise a young person to pursue a career in teaching—again, a dramatic change.

But despite gains in status and pay, the surveys reveal a disturbing trend. Many who are just entering the profession quickly grow disenchanted. More than a third of the newest teachers to the profession say that they will leave within 5 years, and among minority teachers, a startling 40 percent say they will leave.

Teachers themselves identified ways to attract good people. Not surprisingly, higher pay was important, but teachers think the compensation for beginning teachers should be comparable to other professions that require similar training. But other factors are also important, like reducing the amount of time spent in administrative duties and reducing teachers' sense of isolation and building more of a sense of collegiality and participation.

Mentor teacher programs are favored by more than eight in ten teachers, who no longer view them as producing artificial, perhaps even threatening distinctions among teachers.

The number of minority teachers should be increased according to three out of four teachers. This may be accomplished, they say, by encouraging minority college students to consider teaching as a profession, providing financial incentives, and expanding recruitment programs down into the high schools.

Teacher preparation may be improved by a full-time, year-around, on-the-job training program for prospective teachers prior to graduation. And many teachers also favor a teaching training that involves colleges with school districts.

When it comes to managing schools, teachers support leadership committees of principals, teachers, even students, to set and enforce rules. But most teachers think they should not play a major role in a range of tasks traditionally reserved for administrators. They want to be involved in curriculum and planning and things that involve the classroom, but they don't wish to take over things that are generally the responsibility of administrators. In fact, they want to give principals greater control in their schools over the rules that govern their schools.

They think most of their fellow teachers are doing a good job, but almost unanimously want to make it easier for incompetent teachers to be removed.

But teachers need help. The social problems that intrude in all of our classrooms are seen by teachers as an obstacle to teaching and as an obstacle to learning. And they say that these social problems have worsened and strongly advise that social services are needed to keep students from slipping through the cracks.

Nine in ten teachers think community resources should be mobilized so that they can refer students to them, and a large majority of parents agree and think that counseling and support services are a key way to improve education. Teachers of high school students see drugs, drinking and dropouts on the rise.

Given these obstacles to learning, teachers believe students need better opportunities, programs to address drug and alcohol abuse, and more after-school activities. And they ranked social workers and family services at the head of the list of choices for added funding; guidance counselors ranked second.

A majority of teachers see value in magnet schools, but are divided on parental choice. Many feel choice could cause some schools to become unpopular and that the children going to them, perhaps the most disenfranchised, might lose out, and interestingly, parents agree.

But teachers from 1984 in the beginning have shown a willingness to change. They make the statement over and over that they love to teach, and this perhaps is the best indicator and the most positive indicator of change that teachers want to be heard; they are simply asking us for more help to overcome the many social obstacles that confront them in the classroom.

[The prepared statement of Dr. Jacobson follows:]

United States Senate
Committee on Labor and Human Resources

Subcommittee on Education, Arts and Humanities

Hearings

Statement of

Sibyl Jacobson, Ph.D.
Vice-President, Metropolitan Life Insurance Company
President, Metropolitan Life Foundation

February 22, 1990

Thank you, Senator, for this opportunity to bring forward pertinent findings on the state of the American teacher.

In 1984, Metropolitan Life Insurance Company first asked Louis Harris and Associates to poll American teachers about their concerns and aspirations as educators. This series of seven commissioned surveys represents a sustained program of research designed to bring teachers' opinions to the attention of the education community and the American public. Over the years, survey reports have highlighted such topics as the relationships among teachers and students; developments in the teaching profession; links between home and school; the views of former teachers; the distinctive circumstances of minority teachers; and the state of schools and the social environment in which they function.

Each survey is based on interviews with a nationally-representative sample. As a series, these surveys afford a retrospective on the years of major education reform and, employing trend data from several different years, measure the impact of this important period in education. The 1989 report presents some possible directions schools might take during the coming decade by examining teacher's priorities for the near-term future.

I believe certain findings will be of special interest to this committee, and so my remarks focus on findings with a bearing on:

Teachers' own view of their profession;

The importance of initiatives for teacher recruitment and retention;

The critical shortage of minority teachers;

The models believed by teachers to be the most successful means of teacher preparation;

School-based management teams;

Links between the school and the community; and

The issue of parental school choice as it relates to the establishment of magnet schools.

Let me say first that the surveys indicate that the professional status of teachers improved during the latter half of the 1980s. In 1989, 48% of teachers said they believed they could earn a decent salary as a teacher, up from only 37% in 1984. Also in 1989, 53% of teachers agreed with the statement that "as a teacher I feel respected in today's society." When our first survey was conducted in 1984, only 47% agreed.

Partly as a result of these improvements, two-thirds --67%-- of America's public school teachers now say they would advise a young person to pursue a career in teaching -- only 45% would have provided such advice in 1984.

However, the 1988 survey revealed that young people entering the profession may quickly experience disenchantment. More than one-quarter of all teachers --26%-- and more than one-third of those with less than 5 years' teaching experience --34%-- said they would leave the profession within 5 years.

Among minority teachers, the proportion reached a startling 40%.

Early on in the course of these surveys, teachers themselves identified steps they felt would attract good people into their profession. Higher pay was deemed to be important: the 1985 survey showed that 75% of teachers felt providing compensation to beginning teachers comparable to that in other professions which require similar training could attract good people. But while higher salaries may help, a majority of teachers also stressed the importance of reducing the amount of time spent in non-teaching duties and providing time for teachers to discuss their needs and problems with other teachers.

While the percentage of teachers favoring such incentives as career ladder programs and even merit pay has increased in recent years, these practices characteristically received little support over the course of the survey series. By contrast, the percentage of teachers favoring mentor teacher programs stood in 1989 at 86%.

Among teachers who think it is important to increase the number of minority teachers in their profession, there is an emphasis on such approaches as encouraging minority college students to consider teaching as a profession, favored by 65%; providing financial incentives for minority students who want to become teachers, favored by 66%; and expanding recruitment programs to high schools, favored by 53%.

As a way to improve teacher preparation, teachers are very receptive to three approaches:

Many teachers think more direct experience in the classroom would improve teacher training--86% think "a full-time, year-round, on-the-job training program that prospective teachers would participate in prior to graduation" would improve teacher training.

Some 72% feel this approach would improve teacher training if used after graduation.

Teacher training could also be improved, according to 77% of teachers, through "schools jointly operated by a university and a school district whose responsibility would be to train teachers."

Allow me to note that this last finding was an important factor in Metropolitan Life Foundation's establishment of its College-School Partners Program which, since 1986, has awarded more than $1 million to 20 colleges and their public school partners to support their joint teacher-preparation projects.

The surveys demonstrate both considerable progress in the 1980s and the need for further reform. There are several proposals that large majorities of teachers are willing to support:

There is widespread support among teachers for the establishment in every school of a leadership committee of principals, teachers, and students to set and enforce rules: 67% agree strongly that every school should establish such a committee. At the same time, most teachers think they should not play a major role in such matters as assigning students, scheduling classes, budget allocations, selecting principals and handling the non-education problems children bring with them to school.

There is also widespread agreement with the statement that "principals should have greater control over the rules governing their schools." Forty percent of teachers agree strongly and another 40% agree somewhat with this statement.

While 93% of teachers think most of their fellow teachers are dedicated to their work, a similar 95% of teachers think that "making it easier for incompetent teachers to be removed" would help attract and retain good teachers.

The surveys have shown that teachers believe that certain basic conditions enable them to do their job better. Among these conditions are greater collegiality, smaller classes, and less time spent on administrative tasks.

> 41% of teachers report that their schools are now better in "having more structured and organized time to talk with colleagues about professional matters," but another 39% report that their schools are worse now;
>
> 37% of teachers say that their school is better now at "having teachers able to observe other in the classroom and provide feedback to each other," while another 33% of teachers say their school is worse now at this than three years ago.

Although teachers believe that smaller class size helps them do their job better, the proportion of schools with smaller class size virtually unchanged from three years ago -- 42% of teachers report their schools are now better, 41% report their schools are now worse, and 15% say there has been no change;

With respect to "reducing the time teachers need to spend on administrative tasks," the nation's public schools are losing ground. Nearly two-thirds of teachers (64%) say their schools are worse than they were three years ago, and only 23% of teachers say their schools are better.

Though teachers feel better about aspects of their profession, in contrast, they describe the problems they confront--namely problems presented by the society in which they practice that profession--as having worsened.

Teachers want schools to be able to assist students and their families in alleviating social and health problems which can affect the educational process. In 1989, fully 84% said they think the integration of education and social services "would be a smart way of keeping at-risk students from slipping through the cracks." Nine in ten teachers --90%-- think community resources should be mobilized so that they can refer their students to them. The 1987 survey revealed that 80% of parents also look favorably on counseling and support services as a way to improve education. Teachers also believe that schools should play a greater role in helping students make the transition from school to work.

In 1987, 96% of teachers said they thought that children left on

their own after school was a cause of students having difficulty in school, and in 1989, more than three out of four teachers -- 76%-- still found it a serious problem, including 33% who saw it as a very serious problem.
Student absenteeism is considered a serious problem by more than half --53%-- of all public schools teachers, and appears to be worsening. Furthermore, absenteeism worsens as children progress through school; the same 1989 survey revealed that 79% of high school teachers characterized it as serious.

Teachers of high school students see drugs, drinking, teenage suicides and pregnancies on the rise. Last year, 81% of high school teachers said drinking is a problem, up from 66% in 1985. Drugs, as a serious problem, increased from 58% to 70%; suicides as a serious problem grew from 17% to 27%, and the drop out rate as a serious problem increased from 40% to 53%.

Given these obstacles to learning, teachers believe that better job opportunities (33%), less drugs and alcohol abuse (29%), and more after school activities (29%) are the changes in their school's communities that would have the most beneficial effect on education in their school.

Teachers are concerned that schools, as currently organized, are not fully equipped to deal with the worsening social problems they confront. A large majority think schools should be an access and referral point for social services, while only 28% of teachers think schools shouldn't have this responsibility, and should focus on academics and not social services.

Consistent with their sense of the need for social services to deal with growing problems, when asked which two services they would most like to see given added funding in their school, social workers and family services were named by 40% of teachers, and ranked at the head of a list that included sports programs as the least-favored item for more financial support. Additional funding for guidance counselors was named by 31%.

A majority of teachers see value in magnet schools. But in assessing the impact of magnet schools, it may be important to note the views of teachers on choice. Asked in 1989 if "allowing parents and students to choose the school the students want to attend" would help improve education, 53% said it would help and 46% said it would not help. Among teachers surveyed in 1987, 75% expressed the view that some schools would be unpopular, and the children going to them would lose out; the teachers were joined by 69% of a national sample of parents asked about choice.

About two-thirds of America's public school teachers look to the 1990s with optimism about how education will change. On the whole, 69% are optimistic that educational changes will be better five years from now, and 64% are optimistic that the educational performance of students will be better. And from the first, teachers have consistently indicated their willingness to change --an unexpected finding when it was first revealed in 1984.

Let me close by reiterating one of the first important findings of this series of surveys: teachers love to teach -- 81% agree strongly, another 16% agree somewhat, and only 2% disagree. We found this to be just as true today as it was in 1984. And this sentiment is relatively constant across school level, school location, and ethnicity and socioeconomic situation of students. Despite all the obstacles, our teachers are asking, most of all, for our help so that they can do their job better--the job of educating our children. This is, I feel, one of the most promising indicators of real change in the nation's efforts at improving education.

Senator **Pell**. Thank you very much, Dr. Jacobson. I was delighted to hear you say that the survey showed that teachers have more respect now than they did in 1984.

Dr. **Jacobson**. It was a dramatic increase.

Senator **Pell**. I thought it had gone the opposite way. I am very glad. What were the specific figures?

Dr. **Jacobson**. I'll find them in a moment. I think it was a 15-point percentage increase from 1984 to 1989.

Senator **Pell**. And would the other two members of the panel agree with that result, or would you think that that survey is incorrect?

Ms. **Duster**. According to information that we have read on similar studies, that's fairly accurate.

Senator **Pell**. Ms. Aronoff.

Ms. **Aronoff**. I would say so, particularly in the schools where there are reform efforts and where teachers have been empowered and are beginning to have a voice in what goes on in their schools.

Senator **Pell**. I was interested to hear at a hearing we had in Rhode Island of a school in Woonsocket which intentionally does not have any principal, but is run by the teachers, sort of like the Swiss Government is run, on a circulating basis.

Ms. **Duster**. Senator, I would also like to add that I think the figures derived from her studies or her research clearly are on target in indicating that family services or social services need to be more readily available in the schools because of the socioeconomic problems, that children often come to school with. I think that is very much on target.

Senator **Pell**. What would be your thoughts as to what are the characteristics that make for an outstanding teacher? I'll just ask each one of you that question.

Ms. **Aronoff**. I think the most important thing is that the teacher respect his or her students and that the teacher have a knowledge and appreciation of the subject matter. Also, I think planning has a lot to do with it. It is important for a teacher to plan as if we have a lot of expectations for our students, because they will rise to the occasion.

Senator **Pell**. With a particularly difficult student, or in a case in which you don't know a student's background, should the teacher go to the students' homes on occasion, or do you think that would be a mistake?

Ms. **Aronoff**. I think one thing that has helped us at the Essential School at Hope High School is that we do have very close ties with the parents. The parents have to sign a form giving their children permission to be part of the school; we expect them to come to meetings; we make a lot of phone calls and keep them very involved.

It does make a difference, and I think that the teachers who decided to be in this program made an extra commitment to do more—to keep in touch with families more, to check up on students. And teachers who have 200 students can't do that. We have less students, and we have planning time; we have double periods so we spend more time with them.

Senator **Pell**. But do you ever go to the children's homes or not?

Ms. ARONOFF. Very rarely. Sometimes, because we have such close contact, we get invited for dinner and family events and that sort of thing. But mostly, we make phone calls and ask people to come to the school. One thing that we'd like to do in Hope Essential when we have additional faculty is to have somebody who will make home visits. That's one of our priorities, but we don't have the additional faculty to do that now.

Senator PELL. Thank you.

Ms. Duster.

Ms. DUSTER. Among the characteristics that I think are valuable to a teacher certainly would include knowledge of one's subject matter. I think in today's society, one has to also be familiar with the cultural diversity that we have in our school population. The third I think is sensitivity to the growing needs of the students who often come to school unprepared even as early as kindergarten.

Senator PELL. Dr. Jacobson.

Dr. JACOBSON. Teachers can have all sorts of good intention and preparation in their subject matter and so forth, but unless they are given help in how to particularly address the problems of many of our urban city schools—they need help in terms of orientation and working with diverse backgrounds—I think this increasingly is something that teachers are well aware of, that they need help in order to be the good teacher that they wish to be.

Senator PELL. Are any of you familiar with the program whereby some schools give breakfast to the kids when they come in, and they have found there has been a substantial improvement in the performance of those youngsters. Does that apply in any of the schools in which you are working?

Ms. DUSTER. Yes. In fact, the Urban League's headquarters is located in the midst of one of the most devastated populations in terms of geographics in the City of Chicago, and certainly most of the schools who are in close proximity of that office certainly quality for the breakfasts and the lunches.

I think it has been very, very obvious that many of the kids who come to those schools certainly perform better if they are fed.

Senator PELL. Dr. Jacobson, are you familiar with any schools that provide breakfast and what the difference is in performance?

Dr. JACOBSON. The same results—teachers cannot teach children who are hungry, tired, drunk and the like. So that the intrusion into the classroom of social problems prevents teaching and also learning.

Senator PELL. Or is it that there is a long gap in time—the child may have breakfast at 7 a.m., and then by the time 9 or 10 comes along, he or she starts to fade. Would that be so?

Dr. JACOBSON. That's true. And some children, of course, come unfed if there were not provision within the schools to feed them.

Senator PELL. In Providence, Ms. Aronoff, do we have any breakfast programs?

Ms. ARONOFF. Yes. We have a breakfast and a lunch program. One of the problems that we also have is that the buses cost so much. Students get bus tokens to come to school but not to go home, and that could cost up to five dollars a week for one child. So that's an additional expense.

Senator **Pell**. Do you think that our thought of in-service academies and national academies would help, based on the Congressional District or something of that sort, or do you think that is a little extraneous? Let's start with Dr. Jacobson.

Dr. **Jacobson**. Well, I would just be commenting, really, on what the teachers have said on the national sampling. Eighty-six percent of them said they believed a full-time, year-around, on-the-job training program that prospective teachers could participate in prior to graduation would improve teaching. And 72 percent feel that this approach would improve their ability to teach if used after graduation. So it seems to be a rather overwhelming interest in, in a sense, more training and preparation for the classrooms that they will be facing.

Senator **Pell**. Ms. Duster.

Ms. **Duster**. Based on some of the initial surveys that we have done, particularly with the schools that we visited in anticipation of targeting the three high schools to participate in the program that I have outlined in my testimony, many of the teachers have indicated that if they had had some early involvement, perhaps beginning as early as their junior year in college, in having an opportunity to have some exposure on an ongoing basis with schools that were part of their training program at the college level, that would have given them a head start, so to speak, in getting a better grasp of what their responsibilities will be.

Second, I think all indicated that ongoing training was absolutely necessary so that they would have an opportunity not only to interact with their counterparts within their own schools, but also an opportunity to interact with individuals from other schools, perhaps, who had a different approach to teaching a particular topic.

Senator **Pell**. Thank you. Ms. Aronoff.

Ms. **Aronoff**. I agree that teacher training has to change at the university level.

I also know that very often teachers view in-service—the word "in-service" sounds like there is something wrong with teachers and that they need to be "fixed up"—and I know that there has been a lot of resentment because of that. Teachers have gone to workshops and they had said, "Oh, I could have done this myself," or "I would have rather stayed in school today and had my classes." I think it is not the notion of professional training or ongoing development; it is the way in-service programs have been traditionally run. It is very often someone from the top giving the training and the advice as opposed to the teachers themselves. And I think very often administrators fail to see that the teachers do continue to read professional journals and to reach out and talk to other teachers and that there is this ongoing process, but there isn't a vehicle for it; and the vehicle used to be coming in from the outside as opposed to from the teachers themselves.

I think what has helped us a lot at Hope Essential is that we have this relationship with Brown University and their Ed Department, and that has been so important and made a very big difference.

Senator **Pell**. Thank you.

I think we are very lucky in having Brown University in the middle of the city. The same thing happened in health education, too, I think, in having the Brown Medical School.

I envy you going back to Rhode Island this weekend. I'll be going to Nicaragua, in the other direction. I wish you well, and Ms. Duster and Dr. Jacobson, thank you for being with us.

If you have any further thoughts for the record, please let us have them. I will add that the record will stay open for at least a week in case any of my colleagues have statements they wish to make, or you have any addenda. Thank you very much indeed.

We now come to panel 2, which includes Dr. Art Pearl, Professor of Education and Psychology, University of California at Santa Cruz; Dr. Geraldine Carter, executive director, Survival Skills Institute, Minneapolis; and Ms. Barbara Simms, a teacher at Southeast Middle School of Baltimore in Baltimore, MD.

My understanding is that this panel will focus on Title IV of my legislation, the New Careers for Teachers Program, and the crisis we have in attracting minority candidates to the teaching profession. It looks as if it is going to get worse in the next decade rather than getting better. We look forward to hearing from you. The first witness is Dr. Art Pearl.

STATEMENTS OF DR. ART PEARL, PROFESSOR OF EDUCATION AND PSYCHOLOGY, UNIVERSITY OF CALIFORNIA, SANTA CRUZ, CA; DR. GERALDINE CARTER, EXECUTIVE DIRECTOR, SURVIVAL SKILLS INSTITUTE, MINNEAPOLIS, MN; AND BARBARA SIMMS, TEACHER, SOUTHEAST MIDDLE SCHOOL OF BALTIMORE, BALTIMORE, MD

Dr. **Pearl.** Thank you very much, Senator.

You have my remarks, so I am just going to speak extemporaneously.

Senator **Pell.** Good. They penetrate more easily that way, too.

Dr. **Pearl.** First, I'd like to try to make clear what we mean by New Careers. New Careers was an idea that was developed in the Sixties to try to take advantage of two things that we thought we knew—how we could get the best out of a university education and the best out of historical apprentice programs. The idea was that we would take any profession in education, try to organize it in a logical sequence of steps, start making it available for people without any prior skill training or experience and, through a combination of knowledge and skills developed in the classroom, with continuous education, as was emphasized in the previous panel, make it possible for those with the talent and ambition to become professionals to move up a negotiable ladder.

To do this, it means that rather than waiting for a decade to increase the number of minorities in important positions, we can begin to do that almost immediately. Not only could it be done for under represented urban youth and under represented Afro-American and Hispanic populations but also, as it was shown in the Sixties, for Native Americans on Reservations, for rural populations, who also were under represented in the teaching profession, and other people who come from low-income backgrounds.

The experience was quite successful. Upwards of 18,000 people were brought into the Career Opportunity Program of the Educational Professional Development Act of 1967, and the evaluation showed that it recruited a large number—in fact, a majority—of under represented minorities; a very large percentage of them went on to become teachers; and other evidence was that it appeared—there was pretty impressive evidence—that the response of students to these new professionals was better than it had been when they were compared with other teachers. It has all of the benefits that were talked about here before.

I think, however, it is also important to recognize that the program that was initiated in the Sixties, and in some instances was able to continue even though the funding for the program at the Federal level was discontinued for 2 years, had some considerable weaknesses.

The original program, as I said, was discontinued. Most people were only able to get A.A. degrees from it. It was based on a very difficult to achieve matching system. It was organized in a helter-skelter way, much too fast, without the adequate kind of preparation. The evaluation of it was not as good as it should be. And so I think many of the things that I find in this bill remedy the weaknesses that were there before.

I think it is important also to recognize that New Careers differed radically in philosophy from other bills that were initiated in the Sixties. It was organized on the notion of service from rather than service to. It was built on the idea that there was an opportunity for people to become immediately useful, contributors to the society, and those kinds of attributes need, I think, to be developed and continued.

There will be people here who can speak, I think, much more eloquently than I to the kinds of personal benefits that New Careers can bring. I helped author the original legislation, and I think I had enough opportunity to see the program in its various implementations across the country to be able to talk with some knowledge about them.

Again, the idea is that people can be initially brought into schools—we have literally hundreds of thousands of paraprofessionals currently working in schools, a large percentage of them from under represented minorities, who do not have under the current systems the opportunity in most instances to move forward and get a professional degree. They don't have the opportunity for continuous development and opportunity to benefit from the education. And last I'd like to say that what this does do also is provide opportunities for continually looking at and renewing teacher education.

There is, as was pointed out before, a need to continually update and look at how we can improve teacher education and a way of bringing teacher education more closely in contact on a continuous basis with what is going on in the classroom, particularly in those classrooms where the educational challenges are the greatest. It seems to me this is an important part of this bill, and I congratulate you for authoring it, and I wish you success in its implementation. Thank you very much, Senator.

Senator PELL. Thank you very much, Dr. Pearl.

[The prepared statement of Dr. Pearl follows:]

Prepared Statement of Dr. Arthur Pearl

I am here to lend support for Title IV of S. 1676 - The National Teacher Act. Title IV, New Careers for Teachers, revives one of the most successful programs of the 1960s. It was uniquely different from most other programs of that era in that it stressed service from rather than service to. It was a program specifically designed to reduce economic dependency and it was based on the assumption that if given opportunity not only could people work their way out of poverty if the jobs they were in had upward mobility, but, perhaps of even greater importance, they could bring much needed services to underserved communities. New Careers was found in many pieces of legislation in the 1960s beginning with the Scheuer Amendment to the Economic Opportunity Act. Title IV of the proposed National Teacher Act resembles the highly successful COE act of the Professional Act of 1965.

In New Careers, rather than having the applicant meet the requirements of the job, a career ladder was created -- e.g., teacher aide, teacher assistant, teacher associate, teacher. The entry position required no prior skill or experience. New Careerists worked their way up each step of the ladder through a combination of work experience, university courses delivered at the work site and liberal art courses at the university (Pearl & Riessman, 1965). The largest of the New Career programs was the Career Opportunity Program (COP) of the Educational Professional Development Act (EPDA) of 1967.

> "The centerpiece of COP was the paraprofessional aide who was usually minority (54 percent Black, 14.2 percent Hispanic, 3.7 percent Native American. .... Nearly nine-tenths of those enrolled were members of low-income families (88 percent were female)... The program embraced 132 separate sites, roughly 18,000 participants ... (Carter, 1977, pp. 183-184).

The goals of the Career Opportunity Program were diverse, broad and ambitious. In retrospect, probably too broad, too diverse and too ambitious. The COP was designed to: increase underrepresented minority teachers, demonstrate that inadmissible students can succeed in higher education, lift people mired in poverty out of poverty, better meet the needs of low income children, improve staffing in schools, and "respond to the growing belief that the then-present designs of teacher education were inadequate, particularly in preparing teachers for the children of the poor" (Carter, 1977, p. 184).

New Careers apparently made progress on all fronts. How much progress is difficult to gauge since the program was short-lived, inconsistent within and between sites and only superficially evaluated. Despite these considerable difficulties there is powerful evidence to suggest that many minorities were recruited into teaching.

> "COP was designed to serve low-income and minority adults. Nearly nine-tenths of those enrolled were members of low-income families and some seven-tenths were non-white. The continuing shortage of teachers with such backgrounds is seen, for example, in Alaska where 95 percent of the children in the State Operated Schools were Native (Aleut, Eskimo, or Indian), while 99 percent of the teachers at the start of the COP project were non-Native. On the Crow and Northern Cheyenne Reservations in Montana only five of the 210 certified teachers in 1970 were Indians. At their conclusion, the Alaska Career Opportunity Program (run in conjunction with Teacher Corps) will have quadrupled the number of Native teachers, while the project serving the Crow and Northern Cheyenne will have increased the number of Indian teachers tenfold.
>
> "Throughout the Hispanic-American and Indian communities there was still a woeful underrepresentation of "indigenous" teachers. In Texas and the Southwest, for example COP projects emphasized bilingual and bicultural (Hispanic) education, and in New York City, a significant focus was placed in meeting the needs of part of that city's Puerto Rican children" (Carter, 1977, p. 187).
>
> "Of the 142 degree-earning COP participants in the Chicago project, 118 became teachers in target-area schools, that is, in schools populated by children of low-income minority (Black and Hispanic) background" (Carter, 1977, p. 204).

Students in the COP project did extremely well in higher education. An evaluation of four COP projects in Pennsylvania found among those

> "...people who normally would have been rejected in a standard (college) admissions review.... less than four percent of all COP participants were dropped from the program for academic problems... in Philadelphia 85 percent had a C average or better and 46 percent had an average of B or higher......(in Philadelphia 27 students had graduated with grade point average 3.5 or higher and had been named Presidential Scholars. (Carter, 1977, p. 188).

Did COP better meet the needs of low income children and improve staffing in schools? Again the evidence, though uneven and necessarily inconclusive, is generally positive. In the four Pennsylvania projects the Educational Research Association of Bowie, Maryland - an independent evaluator - concluded:

> "the schools were affected in a positive way. (Noted were)...the greatly increased use of teacher aides, a significant change in the way they were used, the beneficial impact of aides on the environment (specifically in the case of Erie with a history of racial tension and violence, the reduction and ultimate disappearance of the disturbances that plagued one location), an increased leadership role for teachers, increased opportunities for minority administrators, greater dependence on local neighborhoods as a source of new teachers, and a general acknowledgement that the COP-trained teachers would be more effective than others who had entered the various systems" (Carter, 1977, pp. 196-197).

Other research also supported the notion that COP was a good way to recruit teachers.

> "The COP program based at the University of North Dakota, with participants from four Indian reservation communities, provided college degrees and teacher certification for 51 new teachers of American Indian origin. Virtually all returned to their communities as full-fledged teachers, thereby creating or improving those conditions: Better relations between children and their schools, a probable slowdown in the rate of teacher turnover, teachers thoroughly attuned to children and their problems, community pride in Indian-related attitudes, and, far from least, proof that schools with Indian children could thrive with significantly larger percentages of Indian teachers" (Carter, 1977, p. 204).

Similar results were found in other communities where the racial/ethnic composition of the student body was much different than the teachers. COP teachers did more than bring a sense of the community to schools. They were, in many other ways, excellent additions to the teaching profession. When compared with a comparable cohort of non-COP first-year teachers the COP teacher appeared to be a better teacher. On tests designed to measure teacher attitude, the COP had more positive attitudes. They performed "... in a more desirable manner ... there was more interchange between student and teacher and students' talk was more responsive and extended... (and) more highly correlated with positive student performance" (Carter, 1977, p.207).

The success of COP teachers did not appear to fade the longer teachers were employed. If anything the differences between COP and non-COP teachers increased in the second year of teaching,

> "COP-trained second year teachers were more aware than their peers of the 'ethos' of the schools..... and the gap (between them and the non-COP group) was widening..... COP teachers tended to be more accepting of individual differences among pupils and felt a greater sense of responsibility and accountability for the pupil's progress" (Carter, 1977, pp. 209-210).

In a follow-up assessment of two bilingual programs (Crystal City and Port Isabel, Texas) the differences between the COP and non-COP teachers were even more marked, "notably in the areas of two-way exchanges between pupils and teachers..... These higher standards was attributed to the unique qualities of bilingual education" (Carter, 1977, p. 210).

The impact of a New Career program can be seen after two decades. The University of Minnesota, in conjunction with many social agencies, had a New Career program, which included the COP, and twenty years after its inception efforts were made to evaluate its success. Like most other such efforts, the program participants had been poor, predominantly Black single women welfare recipients with children. Virtually none had completed high school. Twenty years later, of the 207 persons who had been in the program, at least one had earned a doctorate, dozens had masters degrees and about half, on whom information was found, had graduated from the university. New Careerists reported that the program had changed their lives around from existences hopelessly mired in poverty to well established ways of life (Amram, Flax, Hamermesh, & Marty, 1988).

The conditions that inspired a new career intervention in the 1960s continue to exist, although the context and other conditions have changed. The underrepresentation of certain minorities in teaching remains a serious problem, and because the numbers of

Hispanic students and Asian students are increasing rapidly, the mismatch between the ethnicity of the teachers and the ethnicity of the student population is growing. This continues to be a problem because the school performance of students with underrepresented teachers continues to lag behind the performance of better established students. The record of New Careers, while not spectacular, provides some evidence of a positive gain from more minority teachers serving as role models.

It would be a mistake to make too much from the 1960s programs. There were many clearly identifiable weaknesses in those programs that this bill could hopefully avoid. The most glaring problem of the early programs was that they did not have time to develop; many were terminated in two years because of the conditions of the funding. Marcus Foster, the martyred Superintendent of the Oakland Schools system, told me how he had been forced to end the COP program even though he believed it was the most effective program he had working for the students in that beleaguered system. The provision of five year grants as called for in this bill, with realistic matching beginning after the second year, is a significant improvement over the earlier versions of this concept.

Few of the 1960s programs developed logically defined career ladders, nor did many develop creative staffing patterns. With the emphasis on restructuring in S. 1676, it is imperative that in the first stages, grants be given to programs that have well developed plans for career ladders and well defined job descriptions and preparation plans for promotion.

The greatest obstacle for a successful new carers program is the LEA-IHE relationship. Institutions of Higher Education have difficulty accommodating the demands of a new career program. It is not without reason that those who originally developed the new career concept called it an "upside-down" curriculum. By that, it meant that field experiences normally reserved for the latter stages of teacher preparation take place at the beginning and theory and methods are organized on a developmental basis throughout an individual's preparation to be a professional teacher. New Careerists in the Minnesota program complained that they found the beginning aspects of the program unnecessarily arduous because they were asked to meet all of the university class requirements and all of the job requirements and there was little integration or even communication between the two.

The ideal new career program utilizes the best of an apprenticeship and the best of a University liberal arts education. The challenge is to integrate and generate learning on the job that can legitimately be given university credit and to organize the job to encourage the paraprofessional to think in academic terms. The provisions of this bill call for well defined career ladders and integration between the schools and higher education institutions. It is important that when guidelines are developed the relationship be specific and detailed to insure that this important aspect of the program is met.

And lastly, I cannot emphasize strongly enough how important evaluation is in these developmental stages. The evaluation of the earlier programs was useful but too scattered. Evaluation in this proposed New Careers for Teachers should incorporate not only high quality quantitative research to give solid evidence of how well the program works when compared with other teacher preparation approaches, but it should also use solid ethnographic and other qualitative methods to get a better sense of how the programs met particular problems.

The overriding issue in education is improving the quality of teaching. The criticism directed against some affirmative action programs is that less qualified applicants are chosen over the more qualified. In the final analysis, New Careers provides the best possible way of choosing the most qualified applicant. Only in New Careers does an individual have to prove her-or-himself capable of handling many different situations over a long period of time in the only place that counts - the classroom - before she or he is allowed to become a professional teacher. And perhaps of even greater importance, New Careers brings more quality to the paraprofessional in education by increasing the rigor of training, building more precision to job descriptions, and giving incentive to the most talented to remain in the classroom because there is the real possibility of graduation into a professional position.

Thank you very much for permitting me to speak on this vital topic.

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Senator PELL. Dr. Carter, Senator Durenberger wanted very much to be here to welcome you, but his schedule precluded his being here.

We welcome you.

Dr. CARTER. Thank you.

I wish to thank this committee for the invitation to come and share with you how the New Careers program influenced the flow and direction of my life.

For me, and for so many people like me, the New Careers program was a dream come true. In 1961, I graduated from high school, got married immediately, had two lovely children and then said to myself: Now, what? I felt that after all of the hard work getting through high school—and indeed it was hard work, because for me high school was very boring, and it continues to be very boring for many of our students today. Anyway, I made it through high school. But there was nothing positive waiting for me to do. I had that feeling, and later on my feelings were substantiated by statistics.

There were no positive, financially rewarding employment opportunities for me, a black female with only a high school education.

In 1964, approximately 35.2 percent of America's black female work force were employed as domestics in private households, one-fourth were employed in service work as maids, waitresses in hotels and restaurants, and 11 percent were employed in clerical jobs. And I really wasn't interested in cleaning anybody's house but my own.

I knew at an early time in my life that I wanted to work not only for people but with people, and especially with children.

My first job after I had my children was as a teacher's aide with the Minneapolis public school system. My experience was that I was given all of those children who were experiencing learning and behavior problems, most of whom were minorities, specifically black children, and I didn't really know what to do with them in terms of helping them understand that learning could be fun and exciting and rewarding.

It was in the public schools as an aide that my dream first started to form. I really had a vision of myself being able to help these young children, but I knew that I needed further training. I wanted, I needed, I was determined to get a college education.

I had several prerequisites in place; I had goals, I had deep commitment, I had purpose, I had fear of the unknown that was energizing me. But what was left was that I did not have the financial means.

Then I heard about something that at the time I felt was too good to be true. That was the New Careers program. It was offering an A.A. degree, a program that would pay for low-income adults to receive an A.A. degree.

It was the New Careers program that began a chain of events that really turned my life around. It gave me hope for the future and assisted me in beginning to realize my dream.

What it provided me with was the means to pursue my dream and encouragement. I did meet people at the University of Minnesota who believed that I and others like myself could achieve if only given the chance.

New Careers supported me through tutoring and study skills enrichment; it increased my confidence in my ability, and it really initiated a love affair for me with higher education.

I completed my undergraduate work in 3 years through a combined program—now, this certainly was not planned—through a combined program with going to school at the university in the evening and at Concordia College during the day.

After completing my B.A., I experienced the satisfaction and I still wanted more. I thought there was more that I could acquire to be able to help young children. I did receive additional scholarships to continue my graduate studies, but it was the support base that was provided to me by the Help Center, which I first was introduced to by the New Careers program, that provided moral support to assist me as I studied through the maze of graduate education.

I pursued the master's, I pursued the specialist degree in education. With those things accomplished, I began to live my dream of educating black children while securing a Ph.D. in education.

I taught high school, working with youth with special learning and behavior problems, and after 1 year I became a teacher on special assignment with the Pilot City Mental Health Services, which was a unique arrangement, having a teacher work with Mental Health.

I discovered through my experiences as an educator with the public schools and through my special assignment that it is fine to work with children, but you also must be committed to working with parents, because children do go home, and we want them to have a positive home environment.

I was not able to continue to work with the families as well as the children in the public schools, so I decided to step out of the public school system and start my own private nonprofit agency.

This really was a phase that seemed like the impossible dream, but it helped me to begin to really realize some things that I had always wanted to do, to start my own nontraditional agency. I do believe that I could not have started this agency, though, without the survival skills that New Careers gave me. I wanted to pass those skills on to others who were facing crises in their lives.

I am glad that I have had the opportunity to share with you how New Careers provided me with incentives, the means, the encouragement and promise of dream fulfillment. The program allowed me to gain skills and assert my talents. It helped so many people come to know who they really were and to offer their talents to assist other people in the growth process.

My brother was also part of New Careers.

I just want to say that I really feel that it is because of New Careers that I was able to overcome some real obstacles in my life, and I hope that others will be given the opportunity.

If you put the financial resources together with the human resources, the human spirit can fly, it can achieve, it can overcome many, many obstacles, and it can contribute to society instead of taking away. Thank you.

Senator PELL. Thank you very much, and thank you for the articulateness of your presentation.

[The prepared statement of Dr. Carter follows:]

Prepared Statement of Geraldine Leola Johnson Carter

I wish to thank the Subcommittee on Education, Arts and Humanities for the invitation to share with you how the New Careers Program influenced the flow and direction of my life. For me and so many like me, the New Careers Program was a dream come true!

In 1961, I graduated from high school, got married, and had two lovely children and then said to myself, "Now What????"

I felt that after all my hard work getting through high school, and it was hard work, because I hated high school (it was so boring), I felt that after all my efforts to complete high school, that something was wrong, because there was nothing positive waiting for me to do. (I learned later that my feelings at the time were confirmed by statistics regarding employment of America's Black female work force.) Something was seriously wrong - there were no positive, financially rewarding employment opportunities for me, a Black female with only a high school diploma.

In 1964, approximately 32.5% of America's Black female work force were employed as "domestics" in private households. One fourth were employed in service work (maids, waitresses in hotels and restaurants); eleven percent (11%) were employed in clerical jobs. I was not interested in cleaning anyone's house but my own.

I knew at an early time in my life that I wanted to work. I wanted to work not only for people, but with people - so that my sense of direction would come more from my consumers rather than a traditional boss or superior.

My first job after I had my children was as a Teacher Aide with the Minneapolis Public Schools. My experience was that I was given all of the children who were experiencing learning and behavior problems; most of these children were minority - "specifically Black."

It was as an Aide in the public schools that my dream first began to form. I had a vision of myself being able to help young children learn. I wanted a college education. I wanted to show children that learning could be fun, exciting, self enhancing.

I wanted, needed, and I was determined to get a college education. I had several prerequisites in place: goals, deep commitment, moral purpose, and a fear of the unknown that energized me.

What was left? What I did not have was the financial means. And then I heard about something that at the time I felt was too good to be true - NEW CAREERS - The New Careers Program - a program that would pay for low income adults to attend college to receive an Associate of Arts degree.

New Careers began a chain of events that turned my life around, gave me hope for the future and assisted me in beginning to realize my dream.

New Careers provided me with the means to pursue my dream - ENCOURAGEMENT - I met people at the University of Minnesota who believed that I and others like me could achieve if only given the chance.

New Careers gave me support through tutoring and study skills enrichment.

New Careers increased my confidence in my ability and initiated my love affair with higher education. I completed my undergraduate education in 3 years through a combination of Concordia College (St. Paul) and the University of Minnesota. But after completing my B.A. degree, I experienced a sense of dissatisfaction with my achievement. I experienced a recognition that to be effective, I needed more specialization. I received scholarships to continue my graduate education; however, it was the support base provided by the HELP Center to which I was first introduced by the New Careers Program, that provided the moral support to assist me as I struggled through the maze of graduate education.

I pursued my M.A. I pursued my Specialist degree in education. With those things accomplished, I began to attempt to live my dream of educating Black children while continuing on to secure my Ph.D. in Education. I taught high school youth with special learning and behavior problems and after one year, I became a teacher on special assignment to a mental health team.

I discovered through my experience as an educator with the public schools and through my special assignment on the Mental Health team at Pilot City that issues of childhood success lay with parents.

Children's school success lay with the partnership of parents and schools. Needless to say, I was a little too futuristic in my thinking and so I experienced frustrations. No agency or organization seemed to deliver services to Black children in the particular configuration that I was interested in which, at that time, included a strong parental involvement.

So, ~~I~~ began to dream what I thought was the impossible dream - the dream of establishing my own agency in North Minneapolis designed to serve Black children through working with parents in a problem prevention/intervention process.

New Careers gave me survival skills, and I wanted to pass those survival skills on to others who were facing crises in their lives and who through education and support would be able to overcome and make it through. In 1978, the Survival Skills Institute, Inc. came into being. An agency designed to strengthen Black families. The impossible dream came true. It took hard work and sacrifice, but it came true!

I am glad for the opportunity to share with you how the New Careers Program provided me with the incentive, the means, the encouragement, and the promise of dream fulfillment. The program allowed me to gain skills and assert my talents. It helped so many people come to know who they really were and to offer their talents to assist other people in the growth process.

My brother, Leo Johnson, became a police officer through New Careers. Leo is no longer alive, but his spirit lives on in those who knew him. His spirit lives on in the youth whose lives he touched while working at North High School as a Police Officer Liaison those who knew him directly and those who only heard about what a great man he was. New Careers gave Leo his start and helped him realize his dream of becoming a policeman.

So many of my friends are teachers and social workers - productive, contributing members of society - thanks to the New Careers Program.

My success in my dreams has left me confident - I am one who has overcome - and I continue - every day - to be a role model for young Black girls, for poor people, and for anyone who has had problems in their life.

Thanks to New Careers - I am a role model that says you can overcome. Thanks to New Careers - I am a role model that says you can climb the mountains in your life.

I would like to conclude by saying that there are many others like me who just need a chance - an opportunity of having the kind of resources that a program like New Careers can provide. Combine the right financial resources with the right human resources and the human spirit can fly, can achieve, can overcome many obstacles - can contribute to society instead of taking away. I stand before you as a living example of someone who walked through the doors that New Careers opened!

Geraldine Leola Johnson Carter
1120 Oliver Avenue North
Minneapolis, MN 55411

(612) 522-6654

EDUCATIONAL BACKGROUND

1967-70	B.A. - Elementary Education Concordia College St. Paul, MN
1970-72	M.A. - Educational Psychology University of Minnesota Minneapolis, MN Certificate: Special Learning and Behavior Problems Certificate: Remedial Reading Certificate: Nursery, Kindergarten and Primary Thesis: A Classification of Words According to Their Phonic Structure and Grapheme-Phoneme Combinations
1972-73	Specialist Degree: Special Education University of Minnesota Minneapolis, MN Certificate: Vocational Education
1973-75	Ph.D. - Education Administration University of Minnesota Minneapolis, MN Certificate: Elementary Principalship Certificate: Superintendency of Schools Dissertation: An Investigation of a Self-Concept Enahncement and Language Development Intervention Program on School Readiness Skills In Inner-City Preschool Children

Geraldine Carter, Ph.D. receives

Geraldine Johnson Carter doesn't mince words.

"When it comes to children, I would give *anything* it requires, *including* my life."

It is that passion to help children that led her to establish Survival Skills Institute, Inc., an agency for minority families (predominately African-American) in a tough Minneapolis neighborhood. Opened in a dilapidated house in 1979, Survival Skills focuses particularly on helping families with young children function in the community.

"I have a vision not necessarily of what the buildings are--raggedy old houses--but of what they can be. The same with people. I see the potential. I see the good in people. I also see the weaknesses. I see facets of myself," she said.

Because of her work as founder and executive director of the institute, Carter has been named 1990 recipient of the A.A. Heckman Community Service Award. The award, established in 1985 by the Grotto, Jerome and Northwest Area foundations and the Minnesota Council on Foundations, recognizes service to Minnesota philanthropy or nonprofit organizations. It honors A.A. Heckman, long-time leader in the State's philanthropic community. In conjunction with the award, Carter will deliver a public lecture on "The Family in Crisis in the 21st Century" on May 17.

"(Carter) is a sterling example of the qualities desirable in a human service administrator--the highest academic training, full professional certification, managerial skill, a personal warmth for her clients and her colleagues and a deep respect for and understanding of her clients," said Michael Weber, director of Hennepin County Community Services Department.

"Survival Skills Institute, Inc. has grown under her leadership from a concept to a nationally-recognized program, which has not only effectively met the needs of her clients, but has immediately responded to changing needs in the community. Yet, the flexibility in programming has stemmed from a creative response to changing social conditions rather than from an uncertain program philosophy,"
he continued.

Survival Skills Institute's children are the offspring of drug addicts, batterers, the unskilled and unemployable--members of the emerging underclass. In a homey, cheerful and accepting atmosphere, Carter and her organization offer the children and their families compassion, respect and services ranging from child abuse intervention and parent education to non-traditional mental health services.

"Gerry has a love of people--especially children. She has a deep inner concern about *her* people," said the Rev. Ethel Johnson-Lee, one of Carter's closest friends.

She was impressed with the respect Carter showed her clients, said Gisela Konopka, Ph.D., professor emerita at the University of Minnesota, founder of the Center for Youth Development and Research and former Heckman Award recipient herself who first met Carter as Survival Skills was beginning.

"She has so much love, so much imagination, so much concern. It radiates from her. She does such extraordinary work," said Konopka.

"All I really do is give them a chance," Carter said of her clients. "I want a 'no failure' environment. If you *really* want to succeed, the environment is here. It's up to them if they take the chance. So many people helped me growing up, I just want to give something back."

As one of six children in a single parent family, growing up wasn't all that easy for Carter, but there were glimpses of hope.

She remembers her first grade teacher in an all-black school bending down, looking into her eyes and telling her, "You know, you're gonna *be* somebody."

It did not seem that way for awhile. When Carter was nine, her mother moved the family to Minneapolis. She'd heard of a better quality of life in Minnesota, and wanted her children to have it. The transition was not easy.

Carter and her brother received special services in the public schools, because of their speech patterns and cultural behavior.

"I *hated* school in elementary school, junior and senior high," she said.

When she was 12, she got a job at a nursing home by telling supervisors she was 16.

"I grew up early. I didn't have a long childhood. I've always been a hard worker, and the job also helped with family survival," she said.

Older black women co-workers became her support system. They were like big sisters, they accepted her, and they were role models for dependability and reliability, she said.

She completed high school, married young, had two children and continued working at low-paying jobs.

One of those jobs was as a teacher's aide for children with special learning and behavior problems in North Minneapolis' John Hay School. In working with the children, Carter had an advantage over co-workers--environment gave her insight. As a resident of the neighborhood, she saw the children outside the classroom and knew that part of their school problem was culture and environment. Carter decided she wanted to teach.

"I had a desire to help children learn."

Carter entered college at the University of Minnesota. Following racial riots during the late 1960s, "doors opened" and she transferred to Concordia College. She completed her bachelor's degree in three years.

In addition, she returned to the U and earned her master's in educational psychology, certification to teach special learning and behavior problems and her doctorate in education administration. While completing her graduate degrees, she taught in Minneapolis schools and the University of Minnesota and was a consultant to the Minnesota State Department of Education. Later, she was a developmental disabilities specialist for a program of Pilot City Mental Health Services/Minneapolis Public Schools/Hennepin County, and was associate director of The Minneapolis Foundation in 1978-79 before starting Survival Skills.

"I never started out to get a doctorate," she said, "but I loved college. I reached for the stars. I reached for the moon. I've always been one to take advantage of opportunity."

While opportunity was offered, so was hard work and the challenge to endure. Carter's husband Eugene is an over-the-road trucker and he was gone for long stretches of time. Her mother cared for Carter's children nearly full-time. It was routine for her to feed them and get them ready for bed so that Carter could tuck them in before studying--often until 3 a.m.

"If it weren't for her, I wouldn't have gone to school," said Carter.

Yes, she pushed herself, she admitted.

"I just wanted to be sure my children had a better life--not just my children, but *all* children. It's interesting what the human spirit can do when you have a mission."

There were others who encouraged Carter. Her husband Eugene Carter was supportive.

"We grew up together," Carter smiled. "He's a strong person. He's doing what he wants to do (trucking), and he's had

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A.A. Heckman Service Award

Geraldine Carter, Ph.D.

to reciprocate in letting me do what I want to do."

He continues to help with the agency, recently taking time off from his job to help her renovate the most recently acquired building.

Her long-time friend Johnson-Lee remembered Carter's school days. "She worked very hard. I don't know what motivated her, but I would visit with her and encourage her."

Later, Carter would become instrumental in Johnson-Lee's earning a college degree.

"She's a giver, and a giver of herself," said Johnson-Lee.

She remembered Carter receiving an honor with a monetary award and Carter immediately giving the money to her to pay for her GED testing.

"Having a whole lot of money doesn't give me the same kind of feeling I get from one kid's success. They (children) give me a natural high," said Carter.

"I feel I'm one of the most fortunate people in the world. I'm doing what I want to do. I rest well; I'm at peace. I have to feel deeply about what I do. My work is my play. I see happy, healthy children. I'm contributing in that way."

Yet Carter knows not all her clients will arrive at the goal of functioning in the community.

"I never take credit for people's success. I never take the blame for others' failures."

Not taking the blame has been a growing process, she admits.

After nearly reaching burnout, "I had to make up my mind to not carry people's problems."

She decided she can be a role model, but she cannot make up people's minds.

"I'm accepting now of who I am. I *know* who I am. Once you know that of yourself, you don't sit so much in judgment of others."

That may be the reason for the serenity Seymour Z. Gross, Ph.D., director of Pilot City Mental Health Center, sees in Carter.

Some people call her "Gentle Gerry," he said.

"She is a naturally calming person."

He recalled that although she was trained as an educator, she dealt well in several crisis situations at Pilot City and in the community.

"She can be tough—extremely firm" when she sees injustice, Gross said. She is never vindictive and she is assertive rather than aggressive, but she gives a clear message that she will not accept poor services or unfair action, he said.

She is an excellent role model and has a great sense of mentoring and tutoring, not only for her staff, but for the whole community—one of the few leaders coming from the community, said Russell V. Ewald, former executive vice president of The McKnight Foundation, where Carter was a consultant for several years.

"I give her excellent marks for what she does," he said.

Yet one problem frustrates her.

"I've never felt more devastated than when working with children affected by crack. Crack removes the humanness. We work with the human spirit; crack removes that."

Yet Carter takes life a day at a time, continuing to give hugs, compassion, services and hope.

"As I look at the families, I think 'There but for the grace of God go I.'"

Introduction of Dr. Geraldine Carter

Mr. Chairman I want to thank you for the opportunity to introduce a constituent of mine who truly represents the success of some of the programs we are talking about today.

Dr. Geraldine (Gerry) Carter started off like many women of her time. She graduated from high school, got married and raised her children. As her children got older, she went to work and got a job as a teachers aide in the Minneapolis Public Schools. Looking for a way to move up the ladder, Dr. Carter found out about the new careers program that allowed her to attend college and work for her bachelors degree in education. The new careers program allows paraprofessionals and other non-teachers within the public schools system to earn their teaching degree and to go on into careers in elementary and secondary schools.

In addition to her bachlors degree, Dr. Carter also received her Masters degree in Education Psychology, and her PhD in Educational Administration from the University of Minnesota. As you will see by her testimony before us today, Dr. Carter has more than returned her services to the teaching profession.

Over the years, Dr. Carter has worked as a preschool language development specialist at the Parent Child Care Center, as a research assistant at the University of Minnesota, Supervisor of Student Teachers at Clinton Elementary School, Special Consultant to the State Department of Education, and a Specialist in Learning and Behavior Problems at Central High School in Minneapolis.

The knowledge and experience she has gained over the years has lead her to found the Survival Skills Institute in Minneapolis. Survival Skills Institute is a non profit organization to facilitate healthy family functions of minorities and at risk children and their parents - providing a number of innovative family focused child development programs.

Although Gerry likes to keep a low profile in the work she has done, her achievements have proved to bring wide recognition for her accomplishments. Most recently she received the Wilder Non-profit Excellence Award for the work she has done through the Survival Skills Institute. She was also the first recipient of the Community Service Award by the University of Minnesota's Black Caucus.

There are many other accomplishments and achievements that I could outline for you all, but I prefer not to take any more time of the Committee and to allow Dr. Carter to speak for herself. Again, Mr. Chairman, I would like to thank you for bringing before us today such a distinguished panel of witnesses.

Senator PELL. Ms. Simms.

Ms. SIMMS. Well, it is kind of hard to follow that speech. But I am a very simple person, and we are all here about the same thing—educating the children.

Mr. Chairman and members of the committee, I am Barbara Simms, a sixth, seventh and eighth grade special education science teacher at Southeast Middle School in Baltimore, Maryland and a member of Baltimore Teachers Union, Local 340, of the American Federation of Teachers, AFL-CIO.

AFT President Albert Shanker told you at a prior hearing that more than 5,000 paraprofessionals in Baltimore and New York City alone have become teachers. I am proud to say I am one of those 5,000.

As a former education paraprofessional, I have a special interest in this legislation before you. I became a paraprofessional in Baltimore City schools in 1968. I'd like to make a correction right here. In 1970, I began my teacher training and completed it 4 years later. I continued on and received my masters also. I received a B.S. in special education in 1974, and I received my masters in mental retardation in 1976. I have been a certified teacher for 16 years.

Paraprofessionals joined the education team in the mid-Sixties, first as a part of efforts to address the needs of at-risk students and later as part of the team instructing handicapped children.

Paraprofessionals were brought into the classroom to help the teacher with paperwork and clerical duties. Over the years, their role was greatly expanded to include more individual students and group instruction, reinforcing the teacher's lesson.

During that time, career ladders were developed in several cities, New York City and Baltimore included, as part of the New Careers program. These career ladders provided opportunities for paraprofessionals like myself to get the education and experience necessary to become certified teachers. This was an avenue that would not have been open to me, a single parent of four children in school, without the implication of the Career Opportunities Program in Education in Baltimore City in 1970.

The COPE program allowed me to work half-time as a paraprofessional and to study half-time at Coppin State College. And during my term in college, I went in the afternoon, half a day, at night, and also on Saturdays. That's why I was able to finish in 4 years on time.

I know I benefited more fully from my college training because of my classroom experience. In addition, I worked at a school in my community where I knew the students and understood their problems and needs.

Similarly, a tuition assistance program in New York City was implemented in 1968 but lost funding after 1 year, in part because paraprofessionals did not have a union to represent their interests. That was remedied when New York City paraprofessionals chose the United Federation of Teachers as their representative. UFT negotiated a career ladder for paraprofessionals that provided tuition reimbursement, release time and summer stipends for paraprofessionals to pursue higher education. More than 8,000 paraprofessionals have taken advantage of the career ladder, and 5,000 of them have gone on to become teachers in New York City.

More recently, AFT locals in San Francisco and Denver have set up pilot paraprofessional career ladders to meet teacher shortages in these cities. Twenty-five paraprofessionals in San Francisco have completed the program, and 40 more are in process.

In Denver, 16 paraprofessionals have completed the first year of their program. AFT locals in Chicago and Philadelphia are initiating similar programs.

At the State level, AFT's Connecticut affiliate was the driving force behind State legislation that created the Teaching Opportunities for Paraprofessionals program, which serves minority paras in becoming certified teachers.

As a member of the American Federation of Teachers, I would also like to share with you our interest in the development of career opportunities for paraprofessionals and school support personnel. The AFT represents more than 125,000 classified school employees across the country. The success of proposed changes in the structure of schools and the delivery of education will rely on the important and diverse services and skills provided by all school employees.

School bus drivers get students to school on time. The school secretary is a liaison with parents and the community. The classroom paraprofessional provides special services to individual students. The food service worker provides nutritious school breakfasts and lunches. And custodial and maintenance employees keep the school clean and safe. All school employees have a unique commitment to making our schools work at the highest possible level.

Many of them live in the communities in which they work and very strongly feel the need to provide top-quality educational programs for their own and their neighbors' children. As an example of their dedication and commitment, 78 percent of Baltimore City paraprofessionals have been on the job for 13 years or more.

Like all workers, school employees are eager for opportunities to learn and grow in their careers, whether that means a move into the ranks of teachers or remaining in their current profession. Better schools will depend on providing all school employees the chance to improve their skills and perform their jobs even better than in the past.

The AFT and I whole-heartedly support S. 1675 and S. 1676. We believe that these bills will lead to improvement in the teaching profession and more opportunities for all school employees to improve their skills and the performance of our schools.

I thank you very much.

Senator **Pell**. Thank you very much indeed.

I was interested to hear the impetus that the Careers in Education program has already given some of you.

I will ask Dr. Pearl, who is familiar with the background, who initiated that—was that my predecessor, Wayne Morse?

Dr. **Pearl**. No. It actually starts with the shorter amendment to the Economic Opportunity Act. Wayne Morse carried the bill in the Senate. And for a period of time, there were New Careers riders on almost every bill that dealt with human services.

What happened—and I think it is important to understand—the biggest problem was not so much that the need was lost, but that in education, when we went through a period of declining enrollment, the capacity to absorb more people became very much more limited.

Now we are in a situation where we have rapidly increasing enrollment, particularly in the State that I'm from, where 150,000 new students enter the school system every year, a great percentage of them from under represented minorities, and we have no mechanism to realistically meet that thing without something like New Careers.

Senator PELL. I appreciate that which is why Title IV of my own bill is all about the New Careers for Teachers program.

What this reminds me of a little bit is what should guide us all as public servants, which is what teachers are, and politicians, which is what I am—I have a seven-word motto: Translate ideas into events and help people. That is what we all should be doing, and we are doing—you are doing it in your own way, you are helping people; I am doing it in my own way, to take an idea and put it into a program, which is what Wayne Morse did—I have been in this job off and on for 20 years or more, I guess, now, but which Wayne did before—in our own work.

At any rate, I was just curious how you felt that this New Careers model could accommodate other areas experiencing teacher shortage. Here, I am thinking of the Indian reservations, the rural areas, other minority groups. We have in my State a new surge of immigration of Southeast Asians.

How do each of you see this helping, starting out with Dr. Pearl.

Dr. PEARL. Well, for Indian populations and American populations, New Careers was extraordinary successful and established some very interesting relationships with the University of Colorado and the Sioux in North Dakota, with the University of Montana and the Blackfeet in Browning, with a variety of programs with the Navajo. And it was the only time in our history that we managed to get Native American teachers. That, combined with Teacher Corps and some other kinds of things, we were able to deal with that.

We also have an extraordinary need for bringing in many of our remote urban areas people into teaching who are indigenous to that area and have the capacity—and in this particular time, it is going to be harder and harder to get people to go to those areas, and if they do go to those areas, to have the sensitivity and understanding to be able to work. So that is another population that New Careers should be able to work successfully with.

And let me add one other, which I think is an extraordinarily important one, in California and I think increasingly for other populations—populations from Vietnam and others where there are no teachers, and an increasing critical need to be able to provide services. Here is another place where we could immediately be able to deal with people, provide opportunities for upward mobility, give them the hope and the continuous development that would make it possible for people where we don't have the bilingual teachers available in any numbers to provide them with support.

Senator **Pell**. Thank you. I would agree with you on that, particularly with regard to the Asians, where we really have no teachers, as you point out. In my State, we have a huge influx of very intelligent and hardworking people, but who face many obstacles in their attempts to mainstream into American life.

Dr. Carter.

Dr. **Carter**. Of course, I am most familiar with the urban areas; that is where I live, work, and grew up. We have some excellent people who are already currently involved in the school system as teachers' aides as I once was. The only thing that is lacking for them—they have the commitment, they have the concern, they have the sensitivity, they have the knowledge of how to live and survive in those areas—but they do not have the skills to really begin to help the children learn. And I think that a program such as New Careers that would provided them with those skills—you would just have dynamite teachers, because the commitment, concern and caring is already there, and all they need is the opportunity to gain the skills.

Senator **Pell**. I like your phrase, "dynamite teachers"—that's just what we're looking for.

Ms. Simms.

Ms. **Simms**. I'd like to add to that, because in my situation, I do work in a multi school—Koreans, blacks, white, the whole gamut—and to continue to educate the paraprofessionals, again, like Dr. Carter is saying, we would have some dynamite teachers.

I would just like to expand on the program itself. I was the 144th participant, and for me, the COPE program—Career Opportunities Program in Education—and if it weren't for that program, I wouldn't be where I am today, to be able to raise my four children and educate myself and then work with other children, which I enjoy doing today. I really love my job; I love being there for so many years, and I would just share that I hope they do pass the 25-year retirement bill, because I'm a late bloomer; I did finish at the age of 35. So the New Careers program, I definitely, whole-heartedly support, because to continue to educate the paraprofessionals, we would turn out some dynamite teachers.

Senator **Pell**. Thank you.

I believe I'm correct in saying—correct me if I'm not—that this tension between the local educational agencies and teaching colleges. Are any of you familiar with that tension, and what can be done about it?

Let's start with Dr. Pearl.

Dr. **Pearl**. Well, yes, I am very familiar with it because I work in a higher education institution and I have been involved in that for some time, and it has been a problem. Parts of your legislation address that problem of trying to find ways to bring higher education institutions and the school community closer together and to get people in higher education to be more responsive to the real problems.

I think New Careers, both in its imperfect ways in the Sixties, and hopefully in the more perfect ways in the current legislation, would help enormously to reduce that tension.

I do think it would be very important in those early stages to be ensured, as your bill calls for, the negotiated contract being in place between higher education, the local educational agency and the State credentialling agency so that we can develop models that would be able to ease that kind of continuing tension, and I think the bill as written goes a long way in making that possible.

Senator PELL. Thank you. I appreciate that very much.

Another question. There are a series of steps, like a staircase, that one has to achieve as one goes along. Both Dr. Carter and Ms. Simms have been quite articulate in explaining that. Do you think that is a good system, with the specific steps, or do you think it should be changed in any way?

Dr. CARTER. Could you expand on that a little bit—steps in terms of——

Senator PELL. Do you feel that it is the correct approach that we have Step 1, 2, 3, 4, 5, as you move down the line.

Dr. CARTER. I think I probably skipped some steps. I think we really have to examine what is it that we as individuals need as we begin to progress and grow and develop into our professionalism.

Some of the things that are required by the colleges, I think particularly older, more mature adults, which we are probably going to get, may not necessarily need to go through all of those steps. They come in with some skills and things that I think we need to recognize on the higher education level.

Quite often, too, we have people who are much younger instructing those who are older on how to interact on the human level, and they don't always know it all.

Senator PELL. Quite correct.

Ms. Simms.

Ms. SIMMS. I was just sharing, again, as I was talking to my group in the back that we need to look at both ends, the younger and the older. As I was stating, retirement time, 30 years being in the system, I am at that tender young age now that it is time to retire. So I'm just saying look at the younger, like 21 through 30, something like that, as far as retirement time is concerned for the career ladder, because in many instances, some of the group that I came through with, because of the age situation, they decided they didn't want to go on. But I went on because of my children and being a divorcee and all that, and I'm glad I did, because I have received many benefits and many rewards from it. So I am just saying look at the age.

Senator PELL. Dr. Pearl.

Dr. PEARL. I think it is important that we have a career step ladder in the bill. I think it is also important that in the evaluation, that that be looked at. When the bill came into being, that was basically an arbitrary guess that I came up with, without experience, that we ought to have this four-step approach, because I felt it was important that people could see themselves moving with that kind of hope, progressively up a ladder to a professional career.

I think it certainly should be flexible enough so that people who can skip some of those steps should be able to do that, and there should be also places where people can step off at and continue to be able to provide an important service even though they don't have either the ambition or maybe the particular talents to move on to a professional career.

Those intervening steps provide a lot of protection to the system. They provide a protection of making sure people can operate where they are most qualified, and at the same time they make it possible for people to keep moving up and have this ongoing development that people talked about that was so essential to their own careers.

I think it is important—if I can add one other statement based on the earlier experiences—I attended last year a 20-year anniversary at the University of Minnesota where I had the opportunity to meet Dr. Carter. Person after person talked about how difficult those early years were under those existing programs because of the lack of meaningful integration between the university and the field. They talked about having to do three full-time jobs, and it is to their credit that so many of them were willing to do it—a full-time job at the school, a full-time student at the university, and then they go back home, as many of them were single parents, and be full-time parents, and they managed to do it. I think that's great, but I think it would behoove us to make it a little less difficult in this new bill, and this new bill I think does that.

Senator **Pell**. Good. Thank you.

I'd like to turn now to the ranking minority member, Senator Kassebaum.

Senator **Kassebaum**. Thank you, Mr. Chairman.

I apologize for coming in late, and since I did, and did not have the advantage of hearing the comments, I'll just wait until the next panel.

Thank you very much, and I appreciate those who have come to testify.

Senator **Pell**. Thank you all very much.

Our final panel consists of Ms. Brenda Dann-Messier, and we welcome her. She is the director of the Educational Opportunity Center at the Community College of Rhode Island in Providence; we welcome also Dr. Dallas Martin, my old friend and colleague, who is president of the National Association of Student Financial Aid Administrators; and Mr. Constantine Curris, president of the University of Northern Iowa in Cedar Falls.

We'll start with the person from my own home State; welcome, Ms. Dann-Messier.

STATEMENTS OF BRENDA DANN-MESSIER, DIRECTOR, EDUCATIONAL OPPORTUNITY CENTER, COMMUNITY COLLEGE OF RHODE ISLAND, PROVIDENCE, RI, REPRESENTING NATIONAL COUNCIL ON EDUCATIONAL OPPORTUNITY ASSOCIATIONS; DR. DALLAS MARTIN, PRESIDENT, NATIONAL ASSOCIATION OF STUDENT FINANCIAL AID ADMINISTRATORS, WASHINGTON, DC.; AND DR. CONSTANTINE W. CURRIS, PRESIDENT, UNIVERSITY OF NORTHERN IOWA, CEDAR FALLS, IA, REPRESENTING AMERICAN ASSOCIATION OF STATE COLLEGES AND UNIVERSITIES

Ms. **Dann-Messier**. Thank you, Senator Pell. Thank you very much for inviting me to testify today.

The TRIO community is very pleased that you recognize the critical role we can play to increase the number of minority and low-income students prepared to graduate from high school, enter college, graduate from college and become teachers.

I have provided written testimony for the committee, and I would ask that it become part of the permanent record.

I direct one of the six TRIO programs, the Rhode Island Educational Opportunity Center. We serve 4,000 low-income first-generation, college-bound adults annually, 70 percent of whom are members of minority groups. We provide them with information on all the postsecondary educational opportunities available to them, financial aid information, and we provide one-on-one application assistance in helping them to fill out the Federal financial aid and admissions applications.

You might recall, Senator Pell, when you came to our office, you saw our staff working with our clients, helping them to fill out the financial aid forms.

We also provide career counseling and academic and vocational assessments. We follow up on all of our clients quarterly until they no longer need our assistance. Many times, they have questions after they have left our office that they couldn't even anticipate, or have received correspondence from the Federal financial aid office or admissions office that requires further clarification.

Our follow-up is also a way for us to identify the additional needs of our students, such as tutorial support that they may need, and because of that we have added a tutorial component.

Many of our clients also have expressed concern once they have enrolled in college with their math skills. This summer in addressing that, we are going to be providing a workshop on overcoming math anxiety and basic math remediation in addition to our annual study skills workshops.

Many of our clients—and this is typical of all TRIO programs—keep coming back to us, the original point of contact, for the additional services they need since they feel comfortable and secure with the staff member that they have built the relationship with.

Of the 4,000 clients we serve annually, 1,000 enter a postsecondary institution each year, and we continue to provide additional services to them so that they can graduate. We also assist annually 1,200 students receive their G.E.D.

The services we provide in Rhode Island are typical of all EOC and Talent Search programs, who annually serve 300,000 low-income, first-generation, college-bound youth and adults, at the low cost of $130 per client.

But the fundamental problem facing our clients, most of whom are AFDC recipients, is poverty. Without financial assistance through the Federal student aid programs and the loan forgiveness part of the National Teacher Act, many could not graduate from college. We feel very strongly in our office that the loan burden placed on low-income students is a major problem, and we discourage students from entering institutions initially that require them to take out loans.

Lack of financial aid continues to be a major obstacle for our students.

We must also increase our efforts to disseminate information on how to become an effective student. Helping us to reach even younger students is the provision now that Talent Search programs can begin serving seventh and eight graders.

Students need to be informed early on on proper course selection, prerequisites and other needs. Students also need to feel comfortable with the educational system and not feel that the system is working against them. So TRIO programs can continue to disseminate the information on the increased benefits from the National Teacher Act.

Also, TRIO students who have been outside the system would benefit enormously from Title IV of the Act, the New Careers for Teachers component. Career ladders, which enable individuals to move from unskilled status all the way to certified teachers, cannot come soon enough for our clients. Sixty percent of the EOC clients first come to us even before they have obtained a G.E.D., and they want help in identifying long-range career goals that will get them off of public assistance and let them provide for their families.

Many have also expressed to us their desire to become teachers so that they can give something back to the community, just as TRIO programs have assisted them.

Finally let me just say that if the National Teacher Act is to be successful, students must have complete information on all the options available to them and comprehensive guidance and support, trademarks of TRIO programs, programs that work.

Thank you.

Senator **Pell**. Thank you very much indeed, Ms. Dann-Messier.

[The prepared statement of Ms. Dann-Messier follows:]

Prepared Statement of Brenda Dann-Messier

Mr. Pell, Members of the Subcommittee, I very much appreciate the opportunity to testify before the Subcommittee today. I am Brenda Dann-Messier, Director of the Rhode Island Educational Opportunity Center sponsored by the Community College of Rhode Island. I am testifying today on behalf of the National Council of Educational Opportunity Associations and the TRIO community. You have been a very strong advocate for the TRIO programs and TRIO students. These students, as a group, provide an excellent potential pool of future teachers.

Your bill S 1676--The National Teacher Act of 1989, together with S 1675 introduced by Senator Kennedy, offer TRIO-eligible students strong incentives to consider entering the profession. Additionally, they provide great promise that future generations of low-income and minority students will be taught by professionals more adequately educated and compensated, and more sensitive to their particular educational needs.

The TRIO Programs

As you know TRIO refers to a set of six programs authorized under Title IV of the Higher Education Act of 1965. They are formally known as the Special Programs for Students from Disadvantaged Backgrounds. As a group, the six TRIO programs are designed to identify qualified individuals from low-income families who are in the first-generation in their family to attend college, to prepare these students for post-secondary education, to provide supportive services to them while they pursue programs of post-secondary education, and to motivate and prepare them for doctoral programs.

In Fiscal Year 1990, TRIO projects will operate in over 900 colleges and universities and over eighty community agencies. Slightly over 500,000 youth and adults, from seventh grade through college, will be served. Two-thirds of the individuals served by the TRIO programs are from families where the taxable income is less than 150% of the poverty level and where neither parent graduated from college. Among TRIO students, 41% are black, 35% are white, 17% are Hispanic, 4% are American Indian and 3% are Asian.

Educational Opportunity Centers and Talent Search Programs

As an EOC director, I'd like to take an opportunity to speak briefly about the EOC as well as the Talent Search programs. Together, EOC's and Talent Search projects provide information about college opportunities and available financial aid to over 300,000 young people and adults annually at a cost of approximately $130 per client.

Since 1979, the Educational Opportunity Center which I direct serve 4,000 individuals annually throughout Rhode Island. In addition to mounting public information campaigns designed to inform the community regarding opportunities for postsecondary education, the six EOC counselors have weekly office hours in each welfare office and GED center in the state as well as in a number of community agencies such as OIC, the Urban League and the Indian Council.

There, counselors work with individual clients assessing their educational needs and providing career counseling. Additionally, EOC staff provide advice and assistance on completing high school or high school equivalency programs, advice and assistance on completing college admissions and financial aid applications, advice on course selection, personal counseling, and tutorial services. We also provide limited assistance to students who have enrolled in the community college in transferring to four year institutions.

Of the clients we serve, approximately 66% are women, and over 69% are from ethnic or racial backgrounds under-represented in the teaching profession. Most of the individuals we serve are single parents. Very many see teaching as an extremely desirable profession, particularly when their misconceptions regarding the availability of employment in teaching are corrected. About 1,000 of our 4,000 clients enter college each year.

The Barriers TRIO Students Face in Pursuing Teaching as a Profession

A. The Lack of Adequate Financial Aid

In my view, TRIO-eligible students face a number of problems limiting their probability of graduating from college--lack of academic preparation, lack of good information about the opportunities available and lack of peer and familial support to mention just a few. However, it must not be forgotten that the fundamental problem our clients face is poverty--and without adequate financial assistance, few have a realistic opportunity to graduate from college.

In the past decade, the amount of grant assistance available to low-income students has declined substantially. For example, in 1979-80, the maximum $1,800 Pell grant covered 46% of the average cost of attendance at our nation's colleges and universities. By 1990-91 it is estimated that the $2300 maximum Pell will cover only 26% of the average cost.

In my view, this shortage of grant aid is the single greatest obstacle to the participation and success of low-income and minority students in college. For adults with dependents--and more low-income and minority students attend college as adults than do students from families with more resources--the dilemma is even greater. Before accepting a large student loan, for example, they have to measure the importance of their own upward mobility against their ability to provide a similar opportunity for their children. Similarly, low-income individuals receiving public assistance such as food stamps must often measure their desire to attend college against the likely reduction in their family's eligibility for assistance.

B. The Complexity of the Post-secondary System

Young people whose parents attended college learn many important facts about college from a very young age--the range of careers available to individuals with baccalaureate and advanced degrees, the differences in categories of institutions, the importance of enrolling in appropriate high school courses, the availability of a range of possible funding sources for college attendance.

Most of this information is not readily available to low-income families. Consequently, poor students often make choices which make the attainment of a baccalaureate degree more difficult. For example, they fail to enroll in mathematics, science and foreign language courses at appropriate levels in high school or they fail to apply early for all of the student assistance for which they are eligible.

Finally, their very lack of family resources coupled with the lack of available student assistance creates additional barriers to college graduation. Given the lack of aid available, students from low-income backgrounds often have no choice but to attend institutions with the lowest retention and graduation rates. Moreover, many times they are required to attend school on a part-time basis or drop-out altogether for one or more semesters in order to earn the monies needed to continue their education. Such delayed enrollment in turn makes it more likely that they will be attending college at a time when they have dependents--or other major responsibilities--which limit the time available to them to devote to their academic coursework.

S. 1676--Strengthening the Teaching Profession

Mr. Pell, your bill addresses many of the problems that I discussed above. The loan forgiveness program authorized in

Title I is a very necessary element of any strategy to increase the number of individuals from low-income and minority backgrounds entering the teaching profession. As I mentioned, for many Rhode Island EOC clients this program alone will place a baccalaureate degree with teaching certification within reach.

A second aspect of your bill which will, no doubt, be of great benefit to our EOC clients is Title IV, New Careers for Teachers. Over sixty percent of our clients first come to the EOC before they have earned a high school diploma. For many who have the drive and ability to become fully credentialed teachers, that possibility initially appears very remote. Career ladders which enable such individuals to move from non-skilled support positions, through positions such as teacher's aide, to the position of fully credentialed teacher are most appropriate and most needed. I am sure that the forty presently funded Educational Opportunity Centers would be most anxious to disseminate information about and refer clients to such programs.

Certainly Senator Pell, your emphasis on improving teacher education programs, class size research, and providing in-service teaching at the national and local levels is needed. Our experience in those TRIO programs with an instructional thrust such as Student Support Services and Upward Bound provide strong evidence of the need for each of these components. We very much hope that instructors within the TRIO programs are able to contribute to and participate in your in-service programs.

Lastly, I would briefly like to call attention to that section of Senator Kennedy's bill, S 1675, which amends the TRIO subpart to create special summer institutes for future teachers for low-income, minority and first-generation high school students in each state. We are very supportive of this initiative and believe it is another way to increase the number of TRIO students entering the teaching profession.

Mr. Pell, members of the Subcommittee, I very much appreciate the opportunity to testify before you today and would be pleased to answer any questions you might have.

Senator **Pell**. Dr. Dallas Martin, whom I think knows more about student aid than anybody else in the United States.

Dr. **Martin**. Thank you, Mr. Chairman, and thank you for again inviting the National Association of Student Financial Aid Administrators to appear before you.

Let me commend you, Mr. Chairman, along with Senator Kassebaum and Senator Kennedy and the other members of the Senate who have endorsed this bill. Clearly, your leadership in offering legislation to address one of the critical needs of our country is certainly needed at this important time in our history.

As you have noted in the findings of your bill, the United States is confronted with a serious shortage of trained quality teachers to adequately serve the youth of America, who are entering in increasing numbers our elementary and secondary schools.

Let me just note, though, Mr. Chairman, that this shortage of qualified teaching personnel is by no means limited just to elementary and secondary schools, but postsecondary education and in particular graduate education is also confronted with similar problems in the supply and demand of trained Ph.D. faculty.

Clearly, if the United States expects to maintain its preeminent role in the technologically expanding international community, and if we hope to continue to offer our children and our grandchildren the quality and economic security of the kind of life that most of us have enjoyed, then it is essential that we seriously address the total educational system to remove the deficiencies that exist.

I agree with you that the Federal Government unquestionably has a major leadership role to play in addressing these needs.

Let me specifically address the loan forgiveness for teachers provisions that are contained in Title I of your bill.

As you know, the idea of loan forgiveness as an inducement to increase the pool of skilled manpower in specific shortage areas is not new. Loan forgiveness provisions have long been a part of the National Defense Student Loan Program well before it became known as the Perkins Loan Program. Loan forgiveness, or "cancellations," as they are referred to in that legislation, have not only been used to encourage and reward individuals who enter teaching, but provided full loan cancellation options for those who chose to teach in underserved areas or who pursued careers as preschool or special education teachers.

We have also used student loan cancellations as incentives in other manpower shortage areas, through the Health Profession Student Loan Program, the Nursing Student Loan Program, and the Law Enforcement Education Program. Under all of these programs, a set percentage of a student's loan was forgiven for each year of service in a defined occupational shortage area.

Today, students who still receive Perkins loans are still eligible for cancellations if they teach in elementary or secondary schools with high concentrations of students from low-income families, as full-time teachers of handicapped children, as Head Start personnel, as members of the armed forces serving in hostility areas, or as volunteers under the Peace Corps or Domestic Volunteer Service Act.

Loan cancellation or forgiveness provisions are not, however, currently available to students who borrow under Part B of the student loan programs, primarily the Stafford Loan Program, in Title IV of the Higher Education Act.

Your bill would authorize the Secretary of Education to assume the obligation to repay a Stafford loan for any borrower who is employed full-time as a teacher in a public or other nonprofit, private, elementary or secondary school that is in a school district eligible for assistance pursuant to Chapter I of the Educational Consolidation and Improvement Act of 1981.

In essence, this would now enable a student borrower who becomes a teacher in an eligible school to receive loan forgiveness for not only a Perkins loan, but also for a Stafford loan.

In the past few years, the number of students who annually borrow under Part B, the Stafford Loan Program, have significantly outnumbered those who receive Part E Perkins loans. In fact that ratio, Mr. Chairman, is more than two-to-one. About 1.3 million students today annually receive Stafford loans. And I might add that the Stafford loan amounts that these students receive is almost three times as much on the average as the loans that are given to them under the Perkins Loan Program.

In addition it is increasingly common for needy undergraduates to have borrowed from both of these loan programs during their course of undergraduate studies. As such, by expanding the loan forgiveness provisions to both of these major Title IV student loan programs, there is a greater likelihood that the financial benefits of loan cancellations accruing to teachers in critical need areas will significantly increase.

Whether or not this additional inducement will be sufficient to attract more individuals into teaching in critical need areas remains to be seen, but it is certainly a positive incentive that will not hurt.

I think all of us are painfully aware that in the past decade, student loans have become the primary source of postsecondary educational funding available to needy students. During this time, the average level of student loan indebtedness has increased significantly. The ability to successfully manage and repay these increased levels of educational debt is a serious problem for many students, particularly for individuals who elect to enter either low-paying public service jobs or professions such as teaching. As such, offering loan forgiveness to those who teach in critical need areas will certainly provide some needed financial relief.

I would be remiss, however, if I did not note that we view loan forgiveness as only a small part of a solution to a much larger problem. As educational costs continue to rise, and the real dollar purchasing power of Federal student aid funds declines, we are increasingly finding it more difficult to help make higher education affordable for many low and moderate income families without imposing large and multiple student loan debts upon these students.

This increased financial obligation clearly affects their educational choices and career objectives. Research also shows that many of the low-income and particularly minority students, Mr. Chairman, do not perceive student loans as a positive means to help them pay for college. Grants and employment opportunities are perceived by these students and their families alike as a much more positive inducement to help them pay for college.

We still believe, however, Mr. Chairman, that in this bill, loan forgiveness will help to address some of our educational needs. It is certainly a first step in a series of necessary targeted initiatives, and I commend you and the others on the committee for doing so.

Thank you.

Senator PELL. Thank you very much indeed, Dr. Martin.

[The prepared statement of Dr. Martin follows:]

Prepared Statement of A. Dallas Martin, Jr.

Mr. Chairman, members of the Subcommittee, on behalf of the more than 3,200 institutional members of the National Association of Student Financial Aid Administrators (NASFAA), allow me to thank you for inviting us to appear before you today to provide our comments on the loan forgiveness provisions contained in S.1676, the National Teacher Act.

Let me first commend you, Mr. Chairman, along with Senator Kennedy, Senator Kassebaum, and the other members of the Senate who have endorsed this bill, for your leadership in offering legislation to address one of the critical needs of our country. As you have noted in the findings of this bill, the United States is confronted with a serious shortage of trained, quality teachers to adequately serve the youth of America who are entering, in increasing numbers, our elementary and secondary schools. The shortage of qualified teaching personnel, however, is by no means limited just to elementary or secondary schools. Postsecondary education and, in particular, graduate education is also confronted with similar problems in the supply and demand of trained Ph.D. faculty. Shortages of faculty in engineering, business, and other high demand fields are already a problem for many institutions of higher education. Current trends also show that faculty shortages in the humanities, social sciences, and natural sciences will also become very acute in just a few years as we enter the next century.

Clearly, if the United States expects to maintain its preeminent role in the technologically expanding international community and continue to offer its children and grandchildren the quality of life and economic security that most of us have enjoyed, it is essential that we seriously address the total educational system to remove the deficiencies that exist. The federal government unquestionably has a major leadership role to play in addressing these needs. The specific initiatives that you have proposed in the National Teacher Act will help to begin pointing America in some very positive directions.

Let me now specifically address the Loan Forgiveness for Teachers provisions contained in Title I of the bill. As you know, the idea of loan forgiveness as an inducement to increase the pool of skilled manpower in specific shortage areas is not new. Loan forgiveness provisions have long been a part of the National Defense Student Loan Program well before it became the Perkins Loan Program. Loan forgiveness, or "cancellations" as they are referred to in that legislation, have not only been used to encourage and reward individuals who entered teaching, but provided full loan cancellation options for those who chose to teach in underserved areas or who pursued careers as preschool or special education teachers.

Student loan cancellations have also been used as incentives in other manpower shortage areas, through the Health Professions Student Loan Program, the Nursing Student Loan Program, and the Law Enforcement Education Program. Under all of these programs, a set percentage of a student's loan was forgiven for each year of service in a defined occupational shortage area.

Today, students who receive Perkins Loans are still eligible for cancellations if they teach in elementary or secondary schools with high concentrations of students from low-income families, as full-time teachers of handicapped children, as Head Start personnel, as members of the Armed Services serving in hostility areas, or as volunteers under the Peace Corps or Domestic Volunteer Service Acts. Loan cancellation or forgiveness provisions are not, however, currently available to students who borrow under the Part B student loan programs contained in Title IV of the Higher Education Act.

Title I of S.1676 would authorize the Secretary of Education to assume the obligation to repay a Stafford Loan for any borrower who is employed full-time as a teacher in a public or other non-profit private elementary or secondary school that is in a school district eligible for assistance pursuant to Chapter 1 of the Education Consolidation and Improvement Act of 1981. In essence, this would now enable a student borrower who becomes a teacher in an eligible school to receive loan forgiveness for a Perkins Loan and/or a Stafford Loan.

In the past few years, the number of students who annually borrow under the Part B Stafford Loan Program have significantly outnumbered those who receive Part E Perkins Loans. In addition, it is increasingly common for needy undergraduate students to have borrowed from both of these loan programs during their studies. As such, by expanding the loan forgiveness provisions to both of the major Title IV student loan programs, there is a greater likelihood that the financial benefits of loan cancellations accruing to teachers in critical need areas will significantly increase. Whether or not this additional inducement will be sufficient to attract more individuals into teaching in critical need areas remains to be seen, but it is a positive incentive that certainly will not hurt.

All of us are painfully aware that in the past decade, student loans have become the primary source of postsecondary educational funding available to needy students. During this time the average level of student loan indebtedness has increased significantly for most college graduates. The ability to successfully manage and repay these increased levels of educational debt is a serious problem for many students and, particularly, for individuals who elect to enter lower paying public service jobs or professions such as teaching. As such, offering loan forgiveness to those who teach in critical need areas will certainly provide some needed financial relief.

I would be remiss, however, if I did not note that we view loan forgiveness as only a small part of the solution to a much larger problem. As educational costs continue to rise and the "real dollar" purchasing power of federal student aid funds declines, we increasingly are finding it more difficult to help make "higher education" affordable for many low- and moderate-income families without imposing large and multiple student loan debts upon these students. This increased financial obligation clearly affects student educational choices and career objectives.

In addition, at a time when we are trying to attract more students from low-income families and more minority students into four-year baccalaureate programs, we are also being forced to use loans as the primary source of funding to assist them. Research shows, however, that most of these students do not perceive student loans as a positive means of helping them pay for college. Grants and employment opportunities are perceived by these students, and their families alike, as a much more positive inducement to help them pay for postsecondary education.

Therefore, we sincerely believe that if greater numbers of needy students, many of whom are minorities, are going to be encouraged to pursue postsecondary education, and subsequently enter professions such as teaching, we first need to reduce their reliance upon student loans, particularly at the undergraduate level. Secondly, we believe that providing teachers, especially those in critical need areas, with greater financial rewards and the personal status that should be afforded to them will do more to improve the quality of teachers and increase the supply than by simply offering loan forgiveness.

Mr. Chairman, this bill and its loan forgiveness provisions will certainly help to address some of our educational needs. But it is just a first step in a series of many necessary targeted initiatives that are essential to erase our nation's educational deficit. I commend all of you for taking this step toward addressing this critically important problem.

Again, thank you for inviting us to appear before you today, and I will be happy to respond to any of your questions.

Senator PELL. We now come to Dr. Constantine Curris, president of the University of Northern Iowa. And I would add here that Senator Harkin, a member of our full committee, regrets very much he could not be with us today, but wishes you the best, Dr. Curris.

Dr. CURRIS. Thank you, Senator.

Senator Pell, Senator Kassebaum, Senator Cochran, I am pleased for the opportunity to be here. My comments have been entered into the record, and I will try and highlight some significant statements.

I serve as president of the University of Northern Iowa which, for over 114 years has been the primary provider and preparer of teachers for the State. Iowa has been among the leading States in the Nation on measures of educational achievement, including college entrance examination scores and adult literacy. My perspective, then, is one of what works well for us.

The University is an active member of the American Association of State Colleges and Universities, whose members have long accorded primacy to teacher education. I seek to represent the viewpoint of that organization.

The attraction and retention of a greater number of qualified and caring teachers to the education profession must command our highest priority. I, along with my colleagues here, heartily endorse provisions of the loan forgiveness for teachers program. I suspect that national needs will suggest that the 50 percent economically disadvantaged provision may be too restrictive, particularly in selected fields and areas where significant shortages will be expected. The loan forgiveness provision of the National Defense Student Loan Program and other programs are excellent testimony to the effectiveness of this initiative, Senator, and of the ability of universities to administer such programs.

I would add, nevertheless, that the unfortunate shift from grants to loans as the major factor in student aid is the major factor in the decline of students seeking careers in education, and for some minorities, pursuing college altogether. Until that financial aid imbalance is corrected, efforts to attract capable students into teaching and into other professions without substantial economic promise can at best be only partially successful.

Nowhere is this principle more evident than in the severe shortage of math and science teachers. President Bush's call for world leadership in math and science scores will be nothing more than an empty echo if this Nation does not attract significantly more and better qualified math and science teachers. That is not now occurring on our campuses, and we see little prospect that it will.

We endorse provisions in these acts that take us forward in that direction, but progress will unfortunately be circumscribed by antiquated compensation practices which keep school districts from meeting market requirements to recruit math and science teachers. Our market economy compensates college graduates in math and science substantially more than graduates in other fields. Prevalent school salary schedules, however, do not compensate teachers of math and science differently from teachers of other fields.

Very few students with a bent toward math and science are choosing careers in education because of economic sanctions—at least that is from their perspective. Unless we make a concerted effort on all fronts, our success will be limited.

The same is true for minority student teacher recruitment. The Center for Minorities in Education at our university has begun several initiatives to increase the number of minorities pursuing careers in education. Our experience has been successful, but as limited as it is, suggests to us three ingredients necessary for success: (1) introduction and recruitment to the teaching profession must begin in middle or junior high school and is a joint responsibility of teachers, schools and universities; (2) there must be adequate financial assistance to enroll in college, and it must be accessible to these students in order to sustain the dream and the motivation that is provided through that first ingredient; and last, there must be a commitment on the part of school districts to offer employment to their own graduates who complete a teacher preparation degree.

When these three things are put together, we are seeing success. I mention these things to indicate that a mere infusion of cash is not the answer; it is in fact a very small part of the answer. There must be a collaborative program, a true partnership between universities and schools and the teaching profession.

Years of successful experience in preparing teachers for the State of Iowa have convinced us that those who practice in the schools are partners in conceptualizing, planning, and developing and delivering teacher education programs. Likewise, the knowledge base of a profession, the access to resource materials, scholarly expertise, are all found on university campuses. The recruitment and induction of new teachers and the continuing professional development of all educators can be conducted at the highest quality levels when there is a partnership between the university and the practicing profession.

The Professional Development Academies and the National Teacher Academies titles in these bills are steps in the positive direction and build on that partnership.

Colleges and universities affiliated with the American Association of State Colleges and Universities view teacher preparation as central rather than peripheral to their mission. They applaud these initiatives and lend support to their enactment.

Thank you.

[The prepared statement of Dr. Curris follows:]

Prepared Statement of Constantine W. Curris

Mr. Chairman and Members of the Subcommittee:

I am pleased for the opportunity to testify on the proposed National Teacher Act and the Excellence in Teaching Act.

I serve as President of the University of Northern Iowa, which, during its 114 years, has been the primary preparer of teachers for our state. If not foremost, Iowa has been among leading states in the nation on measures of educational achievement, including: college entrance examination scores, adult literacy, and drop-out prevention rates. The institution and state I represent have been associated with educational success, and my comments reflect that perspective.

The University of Northern Iowa is an active member of the American Association of State Colleges and Universities, whose members have long accorded primacy to teacher education. I currently serve as the Iowa State Representative for AASCU. State representatives comprise the association's primary policy advisory group. I have provided the committee with copies of AASCU's 1990 Public Policy Agenda which complements my remarks today, especially in the area of cooperation between school systems and higher education. The University of Northern Iowa, moreover, has cooperated with seven other universities across the nation in developing a statement of principles for quality teacher preparation. Those institutions, collectively known as the Renaissance Group, have issued a brief statement, Teachers for the New World, which has been distributed to you along with a copy of these comments.

On behalf of colleges and universities long identified with teacher education, I am pleased and excited with provisions of the National Teacher Act and the Excellence in Teaching Act, and endorse your efforts to focus the nation's attention and resources on constructive efforts to strengthen the teaching profession and improve the nation's educational enterprise.

My comments focus on those provision of both bills which hold the greatest promise to achieve improvements we all seek.

The attraction and retention of a greater number of qualified and caring teachers in the education profession must command our highest priority. I heartily endorse the provisions of the Loan Forgiveness for Teachers program, including the five-year schedule for forgiveness. I suspect national needs will suggest that the 50% economically disadvantaged provision may be too restrictive, particularly in selected fields where significant shortages will be expected.

The loan forgiveness provision of the National Defense Student Loan program of the 1960's is excellent testimony to the effectiveness of this initiative and of the ability of universities to administer such programs.

I would add, nevertheless, that the unfortunate shift from grants and work-study to loans is a major factor in the decline of students seeking careers in education, and, for some minorities, pursuing college education altogether. Until the financial aid imbalance between grants and loans is corrected, efforts to attract capable students into teaching and other professions without substantial economic promise can at best be only partially successful.

Nowhere is that principle more evident than in the severe shortage of math and science teachers. President Bush's call for world leadership in math and science scores will be nothing more than an empty echo if this nation does not attract significantly more, and better-qualified, math and science teachers. That is not now occurring and, unfortunately, there is little prospect it will occur.

Achieving preeminence for American students in math/science literacy is an attainable goal, but not without the federal government becoming a crucial actor in motivating and providing programs for prospective students and teachers. I applaud your commitment to our nation's students and their welfare and encourage you to pursue relentlessly other major legislative bills which serve to strengthen SB 1675 and SB 1676. I also compliment the chair for his cosponsorship of SB 2114, The "Excellence in Math, Science, and Engineering Education Act," a bill which will also serve to restore math and science to a preeminent place in the United States.

The Mathematics and Science Teacher Enhancement provision of S.B. 1675 is an excellent step forward. Progress will, unfortunately, be circumscribed by antiquated compensation practices which keep school districts from meeting market requirements to recruit math and science teachers. This is the fundamental problem. Our market economy compensates college graduates in math and science substantially more than graduates in many fields. Prevalent school salary schedules do not compensate teachers of math and science differently from teachers of subjects not affected by market conditions. Very few students with a bent toward math and science choose or will choose a career in teaching.

With the collapse of planned economies in Eastern Europe and the concomitant embracing of market economics, is it not ironic that perhaps the last vestige of non-market economics will be the salary schedule in our nation's schools? Compensating math and science teachers according to market conditions is critical to solving the math and science teacher shortage and resulting math and science test scores.

I endorse as well the Minority Teacher Recruitment program. The Center for Minorities in Education at the University of Northern Iowa has begun several initiatives to increase the number of minorities pursuing careers in education. Our experience, limited as it is, already suggests to us three key ingredients to success. They are:

1. Introduction and recruitment to the teaching profession must begin in middle or junior high school, and is a joint responsibility of teachers, schools, and universities.

2. Adequate financial assistance to enroll in college must be available and readily accessible to sustain the dream and provide motivation.

3. There must be a commitment on the part of school districts to offer employment to their own graduates who complete a teacher preparation degree.

I mention these three ingredients to suggest that the mere infusion of cash is not the answer. It is in fact a very small part of the answer.

The establishment of Professional Development Academies (SB 1675) and the funding of Model Programs in Teacher Education and Promising Practices (SB 1676) and the National Teacher Academies (SB 1676) are excellent titles whose implementation will be well-received. Critical to their promise of success is the collaboration between educational practitioners and the professionals incorporated in each of these initiatives. I referred earlier to the Renaissance Group and the Statement of Principles which it espouses. I would call your attention to the third and eleventh principles:

#3. Decisions concerning the education of teachers are the shared responsibility of the university faculty, practitioners, and other related professionals, and

#11. The continued professional development of teachers and other education personnel is the shared responsibility of the university faculty and other education professionals.

Years of successful experience in preparing teachers for the state of Iowa have convinced us that those who practice in the schools are partners in conceptualizing, planning, developing, and delivering teacher education programs. Likewise, the knowledge base of a profession, access to resource materials, and scholarly expertise all are found on university campuses. The recruitment and induction of new teachers and the continuing professional development of all educators can be conducted at highest quality levels when there is a partnership between the university and the practicing profession. Titles establishing Professional Development Academies and National Teacher Academies are built on this partnership.

Similarly, provisions for Model Programs in Teacher Preparation and Promising Practices help to build and disseminate a knowledge base that will prepare teachers for the new world. Funding for the design, implementation and evaluation of innovations in mentoring, alternate certification programs, and partnerships is money truly well spent.

Colleges and universities affiliated with the American Association of State Colleges and Universities view teacher preparation as central rather than peripheral to their mission. They applaud these initiatives and lend support to their enactment.

Thank you.

Teachers for the New World

A Statement of Principles

The Renaissance Group

University of Alabama at Birmingham
Ball State University
California State University at San Bernardino
Florida Atlantic University
Millersville University of Pennsylvania
University of Northern Colorado
University of Northern Iowa
Western Kentucky University

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Preface

In May of 1989, a small group of presidents and deans of education from institutions with a major commitment to teacher education met on the campus of the University of Northern Iowa in Cedar Falls. Representatives of the American Association of Colleges for Teacher Education and the American Association of Higher Education attended the meeting.

The universities participating in the meeting were: University of Northern Iowa, Florida Atlantic University, Western Kentucky University, University of Alabama at Birmingham, University of Northern Colorado, and California State University at San Bernardino.

The purpose of the meeting was to consider: (1) the current state of the national reform effort to improve teacher education, (2) the present role of state colleges and universities in these reform efforts, and (3) the future role that institutions of this type might play in the national efforts to improve teacher education.

Throughout the conversations, there was interest in the characteristics that distinguish programs that prepare teachers in state colleges and universities and in the identification of principles of good teacher education reflected in these programs. Although little effort was made to achieve consensus on any issue, the group did agree on a number of principles of quality teacher education programs and decided to meet again to further refine these principles.

A second meeting was hosted by the University of Northern Colorado in August, 1989. The original set of institutions participating in the Cedar Falls meeting were joined by Ball State University and Millersville University of Pennsylvania. The American Association of Colleges for Teacher Education was again represented at the meeting. The list of principles of quality programs for the preparation of teachers was refined, and the principles were discussed in relation to the larger societal context of education in American society. The group also started to define an action agenda.

A third meeting was hosted by Western Kentucky University in November, 1989. The same institutions convened to reach final consensus on the principles of quality programs for the preparation of teachers, to agree on an action agenda for implementation of these principles, and to lay plans for the continuation and expansion of the group. Those principles and the agenda for action are contained in the pages that follow. The group selected as its name, the Renaissance Group.

Teachers for the New World

Children are the key to the future of our society. Although all segments of society share responsibility for these children, schools play a central role in preparing them for positive and productive lives in the twenty-first century. This reliance on schools for the proper education of our children is, however, occurring in a period of unprecedented social, scientific, and technological change. Urbanization of our society continues at a rapid pace. Pluralism of our culture is increasing. The stability of the family is decreasing. Knowledge is doubling every three years. Technological developments change our lives almost on a daily basis. The speed of computers is increasing dramatically while their size and cost decreases. This is the environment in which schools attempt to prepare citizens for the next century.

Schools and the university programs that prepare teachers and other educators for these schools have not, unfortunately, changed as quickly as necessary to reflect the demands of a changing social environment. Schools generally remind us of our past more than of our future. Therefore, it is essential that colleges and universities intensify their efforts to prepare educators to lead our schools into the next century.

The rapidity of change and the increasing complexity of our society suggest that all community agencies and resources devoted to the service of youth should work cooperatively to bring the highest quality educational experiences possible to our young people. Although teachers and schools should continue to play a pivotal role in this effort, an array of other human service professionals also can play vital roles in the education of our children. Recreation, health, social welfare, justice, and, indeed, a large part of the infra-structure of our society exist to serve children and youth. These agencies, along with the schools, are partners responsible for the quality of education provided to our young people.

Since the school is the single institution in society that has contact with almost all youth, the school should play a leadership role in coordinating the community effort to meet their needs. The school must be viewed, however, as but one part of a total systemic effort of the larger community to provide a coordinated educational experience for its young people.

Teaching and Leadership in the New World

An essential ingredient in providing schools for the new world will be teachers and other school and community leaders prepared to lead education into the next century. Teachers for the future must have in-depth knowledge of subject matter. They must be skilled at constructing and using metaphors that are appropriate to understanding that subject matter. They must understand the structure of knowledge of the disciplines they will be teaching and the inter-relationship of knowledge from various disciplines. They also must demonstrate an understanding that problem- solving requires application and knowledge from many disciplines. These teachers also must know how to teach. They must be adept at managing classrooms. They must understand sequencing of learning experiences and be able to match their teaching with the experiences and cultural backgrounds of their students. Teachers and school leaders must be articulate about their plans and designs for instruction and dedicated to their careers in teaching. They must understand education as a social system and how the school links to other community agencies. Ultimately, they must use their knowledge and skills to assist our children and youth to have a sense of fulfillment and an appreciation of life's experiences and to become productive workers and capable leaders in the new world.

Another key element for new world schools is the preparation of effective school administrators. America needs school leaders who care about children. They must be skilled not only in administration but also in ways of leading education personnel in the business of schools—teaching and learning. School administrators must be visionary and at the same time skilled in knowing how to manage and structure complicated social systems. Leaders for the new world schools must understand, initiate, and manage change to facilitate school improvements and innovation. Administrators must understand and appreciate the role of teachers in providing leadership in the new world schools. The ultimate focus for all of this effort always must be the children.

Statement of Principles

Most school practitioners receive their preparation in state colleges and universities. With their long history and tradition in education, state colleges and universities are uniquely equipped to provide leadership in the reform of teacher education. However, all colleges and universities provide a valuable resource to American education. Those institutions that subscribe to the principles of the Renaissance Group are uniquely equipped to provide leadership in the reform of teacher education. The university-wide commitment to the preparation of teachers on their campuses, outstanding faculty members in all disciplines devoted to the education of teachers, and extensive relationships with schools and other educational agencies provide them with the opportunity to play an active role in promoting change in American education.

Colleges and universities will have to respond to changing conditions and to the need for school improvement: they also must change. Not only must they respond to changes occurring in their external environment, they must be pro-active in leading education into the next century. The colleges and universities need to reaffirm their commitment to the children of our society and to teacher education as a university-wide responsibility and institutional commitment. Furthermore, they need to commit themselves to working in close partnership with schools and other educational agencies to provide quality education to children of the new world.

To address the issues facing teacher education and to be a pro-active force in the reform of education nationally, the Renaissance Group has identified a set of principles for the preparation of teachers. The principles that follow are both *statements* of best practice as currently seen in quality programs for the preparation of teachers and *objectives* to be achieved within colleges and universities that strive for a quality program for the preparation of teachers.

1. **The education of teachers is an all-campus responsibility.**
   A distinguishing characteristic of universities with quality programs for the education of teachers is a university-wide commitment to this effort. With this commitment, teacher education is viewed as a shared responsibility of all units of the university. Although the college, school, or department of education plays a central role in teacher preparation, all faculty members share a responsibility for the preparation of those students who will teach. The university shows its commitment to the importance of teaching by emphasizing quality teaching in all disciplines, by actively working to improve the profession of teaching, and by adequately supporting its program for the preparation of teachers.

2. **Programs for the preparation of teachers thrive in a university culture that values quality teaching.**
   Modeling is a powerful influence on the development of a teacher. In addition to being a major determinant in the depth and breadth of the future teacher's knowledge, all faculty must exemplify the skills, attitudes, and perspectives held by quality teachers. This influence is compounded by the inherent relationship between the content taught in a discipline and the pedagogy used to teach it. For example, the teaching scientist has a knowledge and understanding of science and how to conduct scientific investigations. The teaching scientist also has the ability to transform content into something that can be learned by a specific audience, has enthusiasm for science, has the desire to teach science to others, and has an interest in the learner. The powerful influence of these skills, attitudes, and perspectives on the development of teachers is at the core of quality teacher education.

3. **Decisions concerning the education of teachers are the shared responsibility of the university faculty, practitioners, and other related professionals.**
   All segments of the education community share responsibility for the preparation of high quality professionals for the nation's schools. Although the college or university plays a key role in this process, decision-making is shared with those who make up the larger education community. Those who practice in the schools are partners in conceptualizing, planning, developing, and delivering teacher education programs.

4. **The initial preparation of teachers is integrated throughout a student's university experience and is not segmented or reserved to the student's final year.**
   All aspects of the university experience are seen as integrated components in the preparation of a teacher and the university-at-large has a shared responsibility for the preparation of those students who will teach. Therefore, the integration of the teacher preparation program throughout the student's university experience is considered essential.

5. **The appropriate role of the state is to establish outcome expectations for teacher education graduates; the appropriate role of the university is to determine the curriculum, standards, and internal policies for teacher education programs.**
   In too many states, the imposition of excessive regulation of teacher education programs, as well as a failure to recognize the expertise of those actively engaged in the profession, have led to an erosion of confidence in teacher preparation programs and the unnecessary expansion of program requirements. At the same time, in some of those states, individuals with minimal academic credentials and no preparation in pedagogy are being permitted to enter classrooms and are given the title of "teacher." It is the obligation and prerogative of every state to ensure that all beginning teachers have a firm foundation and essential knowledge in pedagogy and are "safe to practice." It is the obligation and prerogative of the teacher education institution to design a professional education program that will achieve that end.

6. **Rigorous learning expectations and exit requirements characterize the program to educate teachers.**
   Quality programs for the education of teachers have rigorous learning expectations and exit requirements. Exit requirements take precedence over entry

requirements. Prior to being recommended for admission to the profession, an assessment is conducted of students' mastery of general knowledge, pedagogy, their major field, and pedagogical content knowledge.

7. **The academic preparation of teachers includes a rigorous general education program, in-depth subject matter preparation, and both general and content-specific preparation in teaching methodology.**
Teachers entering the profession must be well prepared in what to teach and how to teach it. The "what" includes an extensive and rigorous program in general education, as well as subject matter that relates specifically to the subjects to be taught in the elementary and secondary school curriculum. The "how" includes general methodology that creates positive learning environments, effective motivation, and conditions that result in good interpersonal relations. It also includes being prepared in methodology that relates to effective teaching of specific subject matter content in the curriculum.

Teacher education programs reflect American diversity and prepare graduates to teach in a pluralistic and multicultural society.
Quality programs for the education of teachers have a student population that is reflective of the diversity found in American society. This effort to ensure that all segments of American society are represented in the future teaching force reaffirms the American commitment to equal opportunity and to providing appropriate role models for all youth. Preparing students to teach in a pluralistic and multicultural society underscores our commitment to pluralism and the realization that all teachers need to be sensitive to and respectful of cultural differences that are found in a diverse society.

9. **The education of teachers incorporates extensive and sequenced field and clinical experiences.**
Students preparing to teach must be provided with first-hand experiences in settings where teaching and learning take place from the beginning of their college or university experience. Field experiences should result in cumulative knowledge and skills derived from observation and participation in specific settings. Such observation and participation should allow for interaction among the student, the mentor or supervisor, and university faculty members. It is critical that field and clinical experiences occur in settings that reflect the cultural diversity of American society.

10. **Quality teacher preparation programs have faculty who are active in scholarly and professional endeavors.**
Faculty and programs for the preparation of teachers focus their scholarly and professional activities on issues related to effective professional practice. Such a focus will provide faculty with the opportunity to engage in collaborative research with practitioners that will directly affect schools and schooling.

11. **The continuing professional development of teachers and other education personnel is the shared responsibility of the university faculty and other education professionals.**
The education community shares the responsibility for excellence in the professional development of educators. Continuing professional development for educators includes opportunities to remain current and to increase depth in content and pedagogical knowledge, to improve practice, to study issues facing the profession, and to reflect on personal-professional growth. Shared responsibility for long-range planning among university faculty and school personnel ensures the greatest progress for the profession and for the individual.

12. **Programs to educate teachers for the new world have sufficient support to implement these principles.**
The education of teachers and students for the new world is crucial for the nation's future development and prosperity. Its success will depend in large measure on the active support not only of parents, educators, and elected officials but of the general citizenry as well. This support will take many forms, including a reaffirmation by the education community of the importance of teacher education and additional finances to keep abreast of challenging new social and technological changes. The continued improvement of education is thus a collective responsibility for which there is no effective substitute.

An Action Agenda

Although necessary to achieve a common ground of understanding, a statement of principles, in and of itself, does not carry forward the task of improving teacher education. An action agenda is necessary to achieve this end. Therefore, the Renaissance Group has committed itself to initiate the following activities:

1. Conduct institutes on improving college teaching at all member institutions;
2. Plan and implement a multi-university research agenda;
3. Secure funding for, organize, and host a major conference that addresses critical issues on teachers for the new world;
4. Develop a white paper on the issue of over-regulation of education;

5. Develop a means for exchanging information on campus innovations, advances on teaching techniques, etc. across the Renaissance Group members.
6. Develop strategies for sharing workable models of success in attracting and retaining minorities in the education profession, and
7. Sponsor a forum on relationships and shared responsibilities with school partners.

Membership in the Renaissance Group and Governance of the Organization

1. The Renaissance Group was conceived and established as a President-Dean organization devoted to strengthening teacher education programs. The Group reaffirms that a requisite condition of membership is Presidential involvement with the expected participation of the Chief Academic Officer and the Dean of Education.
2. The Renaissance Group normally will hold two or three general meetings a year.
3. Staffing and organizational headquarters for the Renaissance Group will be determined by the number of colleges and universities accepted into membership and by the nature and scope of activities.

   The Group should be headquartered on a member campus and with released-time professional staffing and donated support services.
4. The Group anticipates that some level of dues payment eventually will need to be established, but it does not recommend any dues or fee arrangements for the coming year.

The modern, comprehensive state colleges and universities comprising the American Association of State Colleges and Universities (AASCU) share common roots and characteristics. With more than 370 member institutions enrolling nearly 3 million students, AASCU institutions provide higher educational opportunity to one of every five students in American higher education. AASCU institutions annually graduate:

- one-third of our nation's bachelor's degree recipients
- more than one-quarter of its master's degree recipients
- 6 percent of all doctorates, and
- more than one-half of America's teachers.

"An education is an investment in people," observed Terrel A. Bell, former Secretary of Education, who maintained that the return on that investment is real and substantial. To increase the investment and make the dividends widely available, AASCU must promote a clear and visible partnership between educational practices and public policies.

AASCU's "1990 Public Policy Agenda" illustrates this partnership. The overall policy direction of AASCU receives in-depth review every three years by the board of directors.

AASCU members elect a 54-member Council of State Representatives, which serves as the association's public policy committee. The council (elected from each state and U.S. territory) annually develops and submits to the membership a specific public policy agenda of federal and state legislative policy issues derived from the board's overall direction. Once the membership approves the agenda, the council—working with the staff of the Office of Governmental Relations—assumes the leading role in guiding its implementation.

The Council of State Representatives has identified and developed public policy priorities for 1990 derived from the board's policy direction and centered around the three central issues of educational opportunity and achievement, higher education policy and finance, and economic and community development. In addition, AASCU created three new programmatic centers within the association offices to sustain momentum in the implementation of these three areas of priority and to provide a sharper and more visible focus for them.

Federal and state budget restrictions make it difficult to expect funding for new programs or sizable increases in raising budget allocations. Recognizing these constraints, AASCU will earnestly advocate policies that reallocate, realign, or reconfigure existing programs and funding as well as propose new funding for high-priority programs that benefit students of AASCU institutions.

Issues selected to enhance educational opportunity and achievement encompass but are not limited to: (1) communicating AASCU institutions' purposes to the media, policy makers, and organizations, (2) providing policy analyses on student aid issues and promoting balanced financial support to encourage greater participation by disadvantaged students underrepresented in college enrollments; (3) opposing significant shifts in federal and state funding allocations; (4) implementing the recommendations made in 1986 by the National Commission on the Role and Future of State Colleges and Universities, (5) supporting recommendations made in 1989 by the President and the nation's governors at the "Education Summit," and (6) supporting proposals to increase or reallocate funding that may benefit AASCU students and institutions.

>>Propose changes to the Higher Education Act of 1965 as part of its reauthorization scheduled in 1991, and advocate federal legislation consistent with the Higher Education Act to provide direct assistance to students—especially to encourage disadvantaged students to complete high school and to pursue a college education.

>>Advocate state legislation and make permanent federal legislation that recognizes the diverse student mix of full-time and part-time enrollments in AASCU institutions and extends student financial assistance on a full-parity basis to part-time students.

>>Advocate federal legislation that shifts the current imbalance of student financial aid funding away from a reliance on loans during a student's first year in college; consider policy changes that could better provide aid in the form of grants and work-study funds during the first year, and support proposals to curtail the award of supplementary loans to first year students. Explore new proposals that restrict first-year guaranteed student loans by phasing in loans as needed after the student becomes academically established.

>>Support improved regulatory and legislative measures to reduce student loan debt burdens and to prevent student loan defaults.

>>Stimulate federal and state interest in creating new programs that will provide incentives for parents and families to save for their children's education, without diminishing the state's responsibility to support public colleges and universities that provide affordable education to their citizenry. Support and strengthen existing teaching, research, and service programs at public colleges and universities for minority students and non-native-speaking citizens, and target funding for programs that increase the participation of disabled and minority students. Advocate increased funding and technical support for our nation's historically black public colleges and universities.

>>Advocate increased funding and technical support for public colleges and universities with large numbers of Hispanic students.

>>Advocate increased funding for, and stimulate federal, state, and local interest in student special services (TRIO) programs aimed at reaching junior and senior high school students who would not otherwise aspire to higher education, who have been discouraged from attending college because of misinformation about costs or lack of financial assistance, or who need developmental skills services to attain the required level of achievement while attending public colleges and universities.

>>Advocate federal and state funding incentives that may emanate from the Education Summit—recommendations that demonstrate cooperation and collaboration between school systems and higher education, especially in the area of teacher education reform.

>>Advocate the expansion of federal funding to meet the authorized levels contained in the recently enacted National Science Foundation Authorization Act of 1988, especially for the Academic Research Facilities Modernization Program. Strengthen the undergraduate and graduate science and engineering curricula.

>>Advocate the science education recommendations in the recent AASCU report, *Formula for Reform*, especially those focused on support for: (1) doubling the National Science Foundation (NSF) budget in the next five years without jeopardizing funding for student aid and other federal program priorities advocated by AASCU; (2) revising the distribution of funds in NSF between research and education, advocating a two-thirds share for research and related activities and a one-third share for science and engineering education; and (3) consolidating undergraduate programs and funding within the Undergraduate Science Engineering and Mathematics Education (USEME) Division of Science Engineering and Education (SEE).

>>Support the development of the nation's capability in research and science on a broad geographical base with AASCU serving as a dominant voice in broadening the participation of this capability.

>>Advocate the establishment, within the Undergraduate Science, Engineering and Mathematics Education Division of Science, Engineering and Education, the Undergraduate Research Participation Program (URP) to support undergraduate research programs and allow higher numbers of faculty at AASCU institutions to compete for funding.

>>Advocate increased funding for developing institutions through Title III of the Higher Education Act, and stimulate federal interest in restructuring the program to allow for a more equitable mix of funding between two-year and four-year institutions.

>>Cooperate with the military in expanding educational opportunities for men and women in the armed services through tuition assistance programs and the Montgomery GI Bill.

>>Strengthen federal and state support of public education at all levels, with a special emphasis on programs that add to the supply of teachers, and enhance teaching and learning effectiveness through initiatives such as federal demonstration grants to higher education institutions.

>>Support programs and funding incentives that help identify and encourage minority students in grades 7-12 to aspire to and prepare for careers in elementary and secondary school teaching.

Priorities and activities selected to enhance higher education policy and finance encompass but are not limited to: (1) analyzing and communicating trends and issues affecting the financing of state-assisted public institutions; (2) advocating public responsibility for the support of education; (3) seeking alternate ways to fund public higher education; (4) promoting effective use of funds and assessing ways to ensure academic quality and cost effectiveness in public colleges and universities in the states; (5) supporting provisions of the tax code that act as incentives to AASCU students and institutions; and (6) assisting state legislative and executive staffs and other associations engaged in the study of state higher education issues, especially in issues relating to the critical mix of state and federal funding of public colleges and universities.

>>Reaffirm to state policy makers the central role of public colleges and universities in serving state and local governments as they address critical public policy problems and issues.

>>Advocate funding at the state level to public institutions so as to retain the "low tuition principle"—the concept of making tuition affordable to enable more citizens to receive a college education.

>>Advocate a reexamination of tax code barriers affecting municipal bonds and other tax-exempt financing vehicles that act as disincentives to the financing of construction and renovation projects at AASCU institutions.

>>Resist further erosion of federal tax code benefits for students and advocate the continuation of the current exemption from employment taxes and the current exemption of tuition amounts of scholarships and fellowships; advocate an end to taxation of scholarships and fellowships for foreign students attending U.S. universities.

>>Advocate a permanent extension in the tax code of tax-free tuition benefits for employees who enroll in college-level undergraduate and graduate courses under the employee education assistance program.

>>Advocate a policy within proposed changes to the federal unrelated business income tax law that does not disadvantage state institutions in their need to meet the demands of their unique student population or to engage in other necessary income-producing activities.

>>Advocate federal and state funding to assist AASCU institutions in constructing, renovating, or improving undergraduate science and engineering instructional facilities and in upgrading or replacing obsolete equipment.

>>Stimulate federal and state interest in funding academic facilities to contain and reverse the consequences of de-

ferred maintenance and to prepare for new enrollment increases expected in the next decade.

>>Assist and support efforts to ensure academic quality and cost effectiveness in public colleges and universities and recognize and foster institutional accountability.

>>Document and promote the importance of higher education to the health, vitality, and well-being of the states by encouraging the states to expand the public investment in public colleges and universities.

>>Help the diverse constituencies of public colleges and universities recognize the vital importance of institutional autonomy and the critical link of that autonomy to the development and preservation of the high quality of public higher education, emphasizing that there is no single best governance or coordinating structure that works for every state.

>>Examine the use of state funding formulas and processes that are both flexible and fair and that recognize demographic changes in institutional mission, such as the number of part-time students at public colleges and universities. Advocate the direct involvement and cooperation of AASCU members in the national agenda stimulated by the Education Summit and in the policy-setting process of the major state-based and regional associations that have an impact on state colleges and universities, including the National Governors' Association, the Education Commission of the States, the National Conference of State Legislatures, and the State Higher Education Executive Officers.

>>Identify new and innovative ways of generating voluntary support for public higher education from external sources—alumni, grants and foundations, and cooperative agreements with business and industry.

>>Stimulate interest in activities that help state policy makers recognize changes in roles, missions, and traditional constituencies of public colleges and universities, and encourage more flexible policies and creative financial incentives to better meet the changing needs of the states and regions.

>>Support and strengthen the use of campus-based student outcomes assessment programs at public colleges and universities to demonstrate accountability to state governments and do so in a way that contributes positively to statewide or systemwide student assessment mandates.

Priorities and activities selected to enhance economic and community development encompass but are not limited to: (1) helping public colleges and universities identify, plan, implement, and evaluate processes to address and help solve local, regional, state, and national economic problems; (2) helping identify specific and central roles for AASCU institutions by developing guidelines and models for economic and community development; (3) promoting a vital link with community colleges; (4) helping AASCU institutions become full partners in efforts to improve social, economic, political, physical, and cultural environments in the regions they serve; (5) and promoting the educational preparation of displaced persons in the community so that they can participate in the economic growth of their communities, regions, states, and the nation.

>>Advocate voluntary national public-service legislation that does not supplant existing student financial assistance programs and oppose mandatory national public service as a condition for student financial assistance.

>>Advocate federal and state funding for long-term reciprocal student and faculty exchange programs, inservice education, staff development, area studies, foreign language instruction, and economic development opportunities abroad

>>Consider the establishment of a new national entity—the National Endowment for International Education and Competence—which will serve to increase the quantity, diversity, and quality of teaching and learning in subjects that enhance the full range of international understanding.

>>Advocate federal and state interest in providing incentives that encourage high school and college students to engage in public-service careers and community service.

>>Stimulate interest in federal, state, regional, and local economic development, using partnership programs directly initiated by or involving public colleges and universities and partners from business, industry, and government.

>>Support the Economic Development Administration and its funding for programs that will harness creative talents contributed by academic and business partners, and advocate that these developmental efforts be funded in a manner that focuses on small business development and utilization of the most appropriate public colleges and universities.

>>Stimulate federal and state interest in funding incentives for public colleges and universities to assume a national leadership role in internationalizing the curricula across the university, and develop policies and practices that reflect the modern realities of global interdependence and competitiveness.

>>Advocate federal and state funding incentives to encourage joint ventures between AASCU institutions and multinational corporations and foreign institutions of higher learning.

>>Stimulate interest in and funding for active collaboration and cooperation among all sectors of the education and public-service communities in support of rural revitalization activities, such as economic development programs and the delivery of distance learning programs

>>Strengthen public perceptions and increase awareness about AASCU institutions' rural and urban programs on a regional and national level.

>>Advocate incentives for funding objectives of the urban public university to ensure the rigor of academic programs, to conduct basic and applied research, and to involve urban universities in the economic, cultural, and social lives of the cities.

>>Advocate changes in state regulations to make it easier for public colleges and universities to attract and perform economic development functions, and advocate a removal of unnecessary obstacles that prevent their broad-based community involvement in economic development and the public sector.

>>Advocate incentives for business and industry to develop training programs that prepare employees for international trade and business.

AASCU institutions have accepted a public responsibility to provide citizens with an equal opportunity for access to a college education. With resources contributed by student, family, community, region, and state and federal governments, the nation has prospered. For all of us in public higher education, AASCU's "1990 Public Policy Agenda" is intended to guide our efforts so that we may continue to count on past contributions and attract new resources in addressing the goals we have set for ourselves.

Education has the opportunity of becoming a top national priority if the public attention it has been given in the aftermath of the first Education Summit is sustained. Specific goals have been set and agreed to by the president and the nation's governors. AASCU will support and assist in the implementation of these goals at the federal and state levels. At the same time, AASCU will continue to pursue the goals set by the National Commission on the Role and Future of State Colleges and Universities—such as expecting at least 35 percent of American adults to possess a college degree by the year 2001 and graduating one million additional public school teachers to meet the anticipated teacher demand during the next decade. This will take commitment, leadership, and resources. More than 40 percent of America's students are over 24 years of age; that figure is projected to surpass 50 percent in the next decade. To recognize this rapidly changing composition of our student population will require new approaches, resources, and flexibility in the years ahead.

AASCU institutions have earned public trust as leaders in higher education. We have accepted the challenge to assume the primary public role in each of our respective states as centers of higher learning. AASCU's "1990 Public Policy Agenda" is the governing influence for us in fulfilling our role of stewardship.

Chair: Eugene M. Hughes, President, Northern Arizona University
Alabama: Frederick P. Whiddon, President, University of South Alabama
Alaska: Marshall Lind, Chancellor, University of Alaska Southeast
Arizona: Eugene M. Hughes, President, Northern Arizona University
Arkansas: Charles D. Dunn, President, Henderson State University
California: John W. Moore, President, California State University, Stanislaus
Colorado: William Fulkerson, President, Adams State College
Connecticut: John W. Shumaker, President, Central Connecticut State University
District of Columbia: Rafael L. Cortada, President, University of the District of Columbia
Florida: Steven Altman, President, University of Central Florida
Georgia: Richard S. Walker, President, Augusta College
Guam: Robert A. Underwood, Acting President, University of Guam
Hawaii: Edward J. Kormondy, Chancellor, University of Hawaii at Hilo
Idaho: Lee A. Vickers, President, Lewis-Clark State College
Illinois: Gordon Lamb, President, Northeastern Illinois University
Indiana: Charlie Nelms, Chancellor, Indiana University East
Iowa: Constantine W. Curris, President, University of Northern Iowa
Kansas: Edward H. Hammond, President, Fort Hays State University
Kentucky: Hanly Funderburk, President, Eastern Kentucky University
Louisiana: Robert A. Alost, President, Northwestern State University of Louisiana
Maine (Institutional Representative): Frederick A. Reynolds, President, University of Maine at Machias
Maine (System Representative): Robert L. Woodbury, Chancellor, University of Maine System
Maryland: James E. Lyons, President, Bowie State University
Massachusetts: Catherine Tisinger, President, North Adams State College
Michigan: Joseph E. Champagne, President, Oakland University
Minnesota: Robert L. Carothers, Chancellor, Minnesota State University System
Mississippi: Aubrey K. Lucas, President, University of Southern Mississippi
Missouri: Ed M. Elliott, President, Central Missouri State University
Montana: W. Michael Easton, President, Western Montana College
Nebraska: Jerry L. Gallentine, President, Peru State College
Nevada: Robert C. Maxson, President, University of Nevada, Las Vegas
New Hampshire: William J. Farrell, President, Plymouth State College
New Jersey: Arnold Speert, President, William Paterson College of New Jersey
New Mexico: Gilbert Sanchez, President, New Mexico Highlands University
New York (SUNY): Charles O. Warren, President, State University College at Plattsburgh
New York (CUNY): Edmond L. Volpe, President, City University of New York, College of Staten Island
North Carolina: Tyronza R. Richmond, Chancellor, North Carolina Central University
North Dakota: Gordon B. Olson, President, Minot State University
Ohio, Neil Humphrey, President, Youngstown State University
Oklahoma: Roy Troutt, President, University of Science and Arts of Oklahoma
Oregon: Larry J. Blake, President, Oregon Institute of Technology
Pennsylvania: James H. McCormick, Chancellor, Pennsylvania State System of Higher Education (Institutional and System Representative)
Puerto Rico: Fernando E. Agrait, President, University of Puerto Rico
Rhode Island: John Nazarian, Acting President, Rhode Island College
South Carolina: Olin Sansbury, Chancellor, University of South Carolina at Spartanburg

South Dakota: Clifford M. Trump, President, Black Hills State University
Tennessee: Margaret N. Perry, Chancellor, University of Tennessee at Martin
Texas: Alfred F. Hurley, Chancellor, University of North Texas
Utah: Stephen D. Nadauld, President, Weber State College
Vermont: Lyle A. Gray, President, Castleton State College
Virgin Islands: Arthur Richards, President, The University of the Virgin Islands
Virginia: Harrison B. Wilson, President, Norfolk State University
Washington: Donald L. Garrity, President, Central Washington University
West Virginia: Dale F. Nitzschke, President, Marshall University
Wisconsin: Charles W. Sorensen, Chancellor, University of Wisconsin-Stout

Senator **Pell**. Thank you very much indeed, President Curris.

Dr. Martin, one of the reasons—and you touched on this in your testimony—we have avoided loan forgiveness under the Stafford Loan Program is because of the technical problems in administering the plan. Do you see any operational or technical problems with the proposal before us?

Dr. **Martin**. There are some that would have to be worked out, Senator Pell. For example, in the Perkins Loan Program currently, because the money goes to the institutions, they manage the funds and hold the funds. The way it currently works is in that program, a student who is planning to, say, apply for cancellation or forgiveness would notify the institution that he or she is employed this year in a particular school district that would be eligible, and therefore there is no payment sent in for repaying that loan during that period of time. At the end of that, the student sends in a final certification to the institution saying that, yes, they completed their year of work in that school district, and then the cancellation is put forward.

In the Stafford Loan Program, as you know, we rely upon outside capital from private lenders. In many cases, the lenders will hold those; many times, those loans are sold to secondary markets. In addition to that, the loans themselves are paid a special allowance on a quarterly basis tied to Treasury Bill rates. So you have a billing process going along where part of not only the interest during the in-school, but afterwards, that the student starts making these payments.

It seems to me that we would have to set up an apparatus similar to that that we have used in the Perkins Loan Program through the Secretary of Education to monitor this with holders of the loan. I don't think that is insurmountable. I believe that through an organization such as the National Council of Higher Education Loan Program directors and our own association, working in cooperation with the Department of Education, that we could do this. But clearly the Department is going to have to have a different way of more or less tracking, if you will, these loans because that paper gets sold and is moved around from one place to another.

So it certainly has some technicalities, Senator, that make it different than the Perkins Loan Program—but should not be insurmountable.

Senator **Pell**. Thank you. One other question. We are all aware and as has been alluded to in the testimony, of the impending shortage of professors and teachers right down the line. I wonder if any of you have any more ideas as to what can be done to turn this around?

Ms. Dann-Messier.

Ms. **Dann-Messier**. Well, I think the career ladder that is proposed is very important. There are many individuals in our community who are working as paraprofessionals and would appreciate the opportunity to have programs that would encourage them to continue their education at what current job levels they are at. I think that that is a very, very important component that would do a lot to help that problem.

Senator **Pell**. Thank you.

Dr. Martin.

Dr. **Martin**. Senator, I speak from some of my own experience, having been a former high school teacher myself at one time. I think clearly the direction that you are moving in is a positive one. I still continue to believe, though, that for many of the students, and particularly a lot of our young people and minority students who are coming into the schools, as has been touched upon here, they need to see that they are going to be successful and have a chance for some economic security.

I have seen too often with young people I have worked with that there is too much temptation to choose another vocation or whatever rather than going into postsecondary education, particularly if all that we can offer them at the first part of that education is loans.

These are families in many cases that do not have normal lending relationships such as you and I have. If they have borrowed, they have probably had bad credit experience in terms of the process; they have often been through some kind of a bill consolidation as opposed to normal credit things because they are people of minimal means.

We need to get those people into school with programs such as your Pell Grant and other things, to make them positive, so they have a chance to succeed. As they persist through that educational system, then I believe that loans may be viable to them, and things such as cancellation have appeal. But it does not in the beginning. So I think twisting that around is the first part.

Once we get them through the educational system, however, let me suggest that if we want good people to stay in our educational system, then we have to give them the respect, and we have to pay them what they are worth, as has been noted by all of our panelists here today.

There is a great reward, and I can say one of the most satisfying jobs I have ever had was working in a public school. But I must tell you very candidly that the primary reason that I left that to move on into higher education was because I knew I could make more money as an administrator in higher education than I could as a classroom teacher.

Senator **Pell**. Thank you. That is quite accurate.

Mr. Curris.

Dr. **Curris**. I would agree with that, Senator Pell. I would merely add that at our university, the primary preparer of teachers in the State of Iowa, we now have more students majoring in accounting than we do in elementary education. I do not wish to denigrate that particular field, but I want to point out two things. One, students respond to that which society values; and second, the financial problems many students experience, particularly with loans, constitute such barriers that there are artificial incentives to pursue careers that are higher-paying in order to satisfy financial obligations.

I know I am preaching to the choir, Senator, but I do want to say that this is a complex problem, and this is a key part of it.

Senator **Pell**. Thank you very much.

Without objection, I would like to insert in the record a statement from the chairman of the full committee, Senator Kennedy, in which he points out that this is the fourth hearing of this committee that is being held on these initiatives, and as we move closer to marking it up, these hearings will play a critical role and also a statement of Senator Hatch.

[The prepared statement of Senators Kennedy and Hatch follow:]

PREPARED STATEMENT OF SENATOR KENNEDY

The CHAIRMAN. Improving the status of the teaching profession is one of the most important tasks in education before us today. Nothing else we do in the education reform movement will be effective unless there is a qualified, caring, enthusiastic teacher in the classroom. We must find ways to encourage more highly qualified individuals to enter the teaching profession, provide sufficient in-service training for our teachers currently in the classroom, and improve retention of our best teachers in the profession. Through the legislative initiatives before the committee, we attempt to do all of these. But today's hearing will give us an opportunity to hear from the experts about what will be most effective in achieving those critical goals.

I want to thank my colleague, Senator Pell for this important hearing on the teacher reform legislation pending before this committee. This is the fourth hearing the committee has held on these initiatives, and, as we move closer to marking up this legislation, these hearings play a critical role in helping us to develop the best package.

PREPARED STATEMENT OF SENATOR HATCH

Senator HATCH. I welcome the opportunity to discuss the need for quality teachers in the educational system. I hope that through the efforts of the Senate, we can encourage many excellent professionals to enter the ranks of teaching so they can impart their knowledge of the world to young children who are eager to learn.

I also hope that we can look at ways to encourage those already in the teaching field to stay enthusiastic and excited about the prospect of teaching for many years to come. Students in our classrooms need to have experienced teachers who are happy in the profession they have chosen. A positive learning environment for students is impossible if teaching becomes a drudgery.

The strength of this country lies in our diverse and open public education system which is controlled by locally elected officials in the thousands of school districts across this country. This diversity and local control is something which every action at the federal level should support. We need to review proposals that are presented for increasing the number and quality of teachers against this criteria.

I commend the Utah legislature and Utah teachers for working together at the local and state levels to solve their problems. I want to assure them that I will do everything I can as their Senator to protect their flexibility and prerogatives to act in a way that benefits our state. While the federal government may be able to facilitate solutions to obvious universal educational concerns, it clearly cannot address the unique needs of every state or school district.

I look forward to reviewing the testimony of our witnesses this morning. I am sure they will provide us with many ideas and comments we can use in evaluating the legislation presented before this committee. I thank you in advance for sharing your expertise with us.

Senator PELL. I now turn to the ranking minority member, Senator Kassebaum.

Senator KASSEBAUM. Thank you, Mr. Chairman.

First, I would like to say I totally agree. Dr. Martin, I believe you are the one who said "respect" and pay. I think that is very much a key. I also believe that we have to start at a much earlier age to interest students in teaching as a career.

I think the TRIO program has normally not even started until senior in high school—is that not right?

Ms. DANN-MESSIER. Ninth grade.

Senator KASSEBAUM. Oh, ninth grade.

Ms. DANN-MESSIER. Now, Talent Search, we can start with seventh and eighth graders.

Senator KASSEBAUM. That's what I understand.

I have long worried about the accumulation of debt, and I think that has a lot to do with a student's choice of career. Students look at their opportunities as they get out of college and the debt they may have.

So I think that the universities themselves—and perhaps even the counselors in the high schools and junior high—have a greater responsibility to try and provide some guidance.

Now, I guess I would be interested, Dr. Curris, in how Iowa does this. You mentioned coordination between the universities and the high schools. What type of coordination and counseling do you have, for instance, for students who express an interest in teaching?

Dr. CURRIS. We try to work with counselors in the broad area of professional development and continuing education so that they feel as if they have partnerships, alliances, with faculty, and particularly faculty in counseling education, at the university.

The concept of alliances is critical, I think, to a university and a school system having the kinds of partnerships that result in success.

If the university takes the posture—and some universities unfortunately do—that those universities have people gifted, and others should respect them, and consequently a paternalistic attitude toward people who work in the public schools unfolds—you are not going to have the kind of partnership that we feel is critical for the kind of success that we want.

We try to take our students into the public schools from various kinds of observations in teacher education. We have a cadre of faculty all across the State affiliated with several centers where our student teachers are actually supervised by faculty members in the public schools. Those kinds of alliances that build genuine partnerships are, in our judgment, the critical ingredients for success.

We are affiliated, I would also say, Senator, with seven other institutions in a group called The Renaissance Group, that is committed to reform in teacher education. This key principle of partnerships with the schools is a common theme for all eight institutions.

Ms. **Dann-Messier**. Senator, if I might add, I think there is another component to that partnership that we really need to include, and that is community-based organizations who work right in the community with the students who we are trying to encourage to become teachers. That is an important and critical component to providing the information and guidance along the way for students at an early age, and we need to make sure that they are part of that partnership.

Senator **Kassebaum**. I am really pleased to hear all of you make those comments because I think that is true. I would also add that it is a little disheartening when you talk to top students, top seniors in high school, and one out of 20 is considering education as a career. It seems to me it goes back again to respect and pay and the requirements that we make on our standards for graduation from high school. I think it is absolutely shocking that we see students going on to college and students who are considering teaching as a career still having to take some remedial work.

I don't think we are going to get respect back and/or pay if we can't also make excellence in education a requirement in the junior high and high schools. If we don't expect much, we're not going to get much.

I think this becomes a part of the whole picture. How we address it, I'm not sure.

Dr. **Martin**. I agree with you, Senator Kassebaum. I think we are encouraged by at least the signs we see coming from here in Washington and across the country with the Governors and others now, who I think are refocusing their intention on the importance of the Nation's educational system.

I think we have a long way to go. I whole-heartedly agree with you. I think many other witnesses today made comments about the importance of the teachers being involved in the schools, the question of respect from the communities and from the others.

Clearly, I recognize that you here do not set the pay levels; we have to all contribute to that. But I think that awareness and continuing to make this a priority and providing the kinds of positive incentives that you are working on can enable the local school districts and others to do their jobs.

But we have unfortunately kind of allowed this to slip in the last few years. We have a tremendous educational system in this country, and we have kind of provided some benign neglect, and I think unfortunately we are paying the price.

It is discouraging to me when I look at overall average national test scores of people entering postsecondary education today and to see on the average that many of those who at that time identify that they are going into education that their scores tend to be lower than in many of the other disciplines.

Now, why is it? Why are we not able to attract the same higher-caliber student that we used to into education? And I think my colleagues here to some part have touched upon that. It is going to take us a while to overcome that. But we have to set the standards high and demand that because our children deserve it.

Ms. **Dann-Messier**. But Senator, I think another critical point is that until the teachers in the school system reflect the students that they serve, they are not going to be able to serve as role models. And at this point, you know what the statistics are for minority teachers, and until we can do much to increase the number of minority teachers who can serve as role models and work with TRIO programs and the guidance staff to encourage students to become teachers, that we have a way to go.

Dr. **CURRIS**. One other thought I would add, Senator, is that our teachers are role models for our students. We all know the impact of teachers on students. Teachers must have pride in what they are doing; otherwise they won't reflect that pride and provide the kinds of incentives.

I was encouraged in an earlier panel where a survey of teachers indicates that pride is returning. I would only say that in historical perspective when we look back over the last 15 years, this Nation has been through a period of some kind of education bashing. We have criticized teachers, we have criticized schools for not doing the kind of job that we as a society believe they should be doing.

It is very difficult to expect teachers and educators to reflect pride to their students and to encourage them to go into teaching when there have been such strident calls suggesting that incapable people are in the classroom. So it is a complex problem.

Senator **KASSEBAUM**. I agree, and furthermore, I think we have expected far too much of teachers in the way of assuming responsibilities that belong at home. I think today teachers have been caught in these conflicting demands, which they should not have to assume in many instances.

Dr. **MARTIN**. I think the linkages, Senator, with programs such as not only the TRIO programs but other social service programs have helped provide that close linkage to address that, because you are correct—we are dealing with a lot of students today who come into the public school classrooms who come from very unfortunate backgrounds and circumstances. You have a lot of latchkey children, you have a lot of children who are not properly nourished, they have not had the economic security at home, many of them live in unsafe areas. We have a lot of things we are trying to deal with, and that is a big load to ask teachers to deal with without some additional support from others.

Senator **KASSEBAUM**. That is very true. They should have a good network of support so that they can call on, and know where to call for someone else to pick up that responsibility. They are there where many times they can sense and understand some of those problems. Yet, to have to be responsible for solving them is perhaps beyond their call.

Thank you very much.

Senator **PELL**. Thank you very much indeed, Senator Kassebaum. I was struck by what you were just saying because the cutting edge of many social changes falls on the teachers. The cutting edge for desegregation really fell on the schools to do it; the cutting edge now for getting rid of the drug problem really falls on drug education. We forget the tremendously important social role that the teachers play.

Well, I thank you all very much indeed. If there are any further statements, they will be inserted in the record within the next week.

[The following statement was submitted for the hearing record:]

Prepared Statement of Anna Lou Pickett

INTRODUCTION

While the purpose of this testimony is to whole heartedly endorse all aspects of the National Teacher Act of 1989 (S.1676), the comments and recommendations in this paper will center on the critical need for the program proposed in Title IV - New Careers for Teachers.

TRAINING PARAPROFESSIONALS FOR TEACHING: ATTRACTING MINORITIES TO THE PROFESSION*

The need to recruit and retain skilled committed teachers is well documented and the need to attract more minority candidates is particularly acute. In this paper we will 1) outline the reasons why paraprofessional personnel serve as an untapped resource for recruiting future minority teachers, 2) review the results of an earlier New Careers Programs, and 3) suggest strategies for strengthening the provisions of Title IV.

Nationwide paraprofessionals are a valuable untapped resource frequently overlooked by teacher educators in their efforts to reach out to and enroll minority students in their programs. Paraprofessionals generally represent a high percentage of the various minority groups in the communities where they live. Many are bilingual. In addition, they are usually long term residents of an area no matter whether it is a remote rural area or major urban center. Because their roots are in the community they are likely to remain there when their education is completed. Further, they have an understanding of local idosyncracies ranging from fiscal problems to philosophies of service delivery based on their knowledge of their cultural and local traditions. And because of their on-the-job experiences they are aware of the pressures attributable to working with students with a wide range of skills and abilities.

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* This material is adapted from: Pickett, Anna Lou. Restructuring the Schools: The Role of Paraprofessionals, Center for Policy Research, National Governors' Association, Washington, D.C. 1989.

This is not the first effort to create a New Careers Program. There are many lessons to be learned from earlier programs supported by federal initiatives and developed during the 1960s and 1970s. These models were designed to remove barriers to career advancement for the poor and disadvantaged, minorities, youth and women. One of the most effective and comprehensive personnel preparation programs developed during that era was the Career Opportunities Program (COP). COP was based on collaboration between local school systems and institutions of higher education. Many of the mechanisms and methods developed through COP are worthy of consideration today.

In From Aide to Teacher: The Story of the Career Opportunities Program, George Kaplan recorded the COP story from its inception in 1970 to its completion in 1977. Developed by the U.S. Office of Education under the Educational Development Act of 1967, the mission of COP was to "provide opportunities for indigenous community residents, working as paraprofessional teacher aides in the nation's low-income urban and rural areas, to advance within the education professions and ultimately to improve the learning of the children in those schools."

The COP design for teacher training represented a sharp break from established teacher education programs. It called for parity among participating school districts and the institutions of higher education in planning and conducting the program. The schools selected the people who were to be trained and described the skills they needed to be effective teachers. The colleges and universities adapted their programs to meet these needs by removing potential barriers. They scheduled required course work at night, provided financial assistance, tutored candidates for high school equivalency tests, and conducted classes off campus near participant's homes.

In analyzing the results of the seven year program, Kaplan reported that COP was an effective way to provide an alternative route to teacher certification for paraprofessional and other school employees interested in achieving professional status. His conclusions were based on the following:

> "The COP training model was generally shaped to the practical needs and demands of its participants. Full-time campus life was neither desirable nor suitable for these adult students who had to contribute to or were the sole support of a family. The COP design was ultimately an enlightened work-study approach to adult learning and professional advancement. The combination of conveniently arranged (for the most part) college work, paid employment, achievable goals.
>
> Early introduction to and immersion in the teacher situation was a quick and natural method of career selection. There were some aides for whom the management of an entire class was a nightmare. They learned this early. And were able to leave the field before their investment of time and money had become irretrievable. Those who took to teaching were spared the usual confusion about career choice.
>
> For teacher aspirants and permanent paraprofessionals alike, the career lattice, was a source of personal security and an assurance of an orderly career in public education. The combination of lattice and ladder was ideal for individuals with professional aspirations who must continue to be concerned on a day to day basis with their existing careers. The lattice was a powerful device in itself for strengthening the legitimacy of paraprofessionalism in education.
>
> The COP decided preference for indigenous participants, as against the outsiders who had traditionally staffed inner-city or other low-income schools made for internal accountability. The aides' own children or their neighbors' children were often in those schools, and, as neighborhood people, they knew and were part of the scene in which they lived and worked. When hiring time came, school principals could draw on experienced practitioners whom they knew both personally and professionally and in whose training they had taken an active interest.
>
> The participants liked the COP formula. It demanded sacrifice, and it stretched physical and intellectual capacities, but it rewarded honest effort and was almost equally demanding of project staff, university instructors, and others involved in the process."

COP officially ended in 1977, and while a few school districts and colleges offer career development programs based on the COP model, most of the programs were never institutionalized and ended when the infusion of federal funds ended. Thus, once the collaborative efforts that enabled more than 20,000 women, returning Vietnam veterans and other disadvantaged low income people to enter careers in education were concluded they were for the most part been lost as a resource for workers and employers alike.

It is important that the Committee not overlook the roles community colleges can play in facilitating career advancement to the professional ranks. Community colleges have played leadership roles in attracting non-traditional students by developing innovative programs and curricula to prepare them to work in agencies throughout the human services delivery systems. In education these efforts have focused primarily on early childhood, elementary and special education programs. Programs that were created twenty or more years ago at the beginning of the New Careers Movement, have managed to achieve longevity although their status and fortunes do ebb and flo based on local economic conditions and student interest. Programs established more recently have found it more difficult to achieve permanency; perhaps because most of them have been initiated with the assistance of outside funds but without a commitment from the college administration to maintain them once the availability of federal or other non-tax levy funding ends.

Perhaps the most signficiant problem encounterd by community college training programs, and therefore the students they serve, involves the articulation agreements between the two and four year colleges and universities. Usually only liberal arts credits transfer for full credit; special education, early childhood credits, or other education credits count only as electives. For this reason paraprofessionals and other potential students do not perceive earning an associate degree as a direct link or an alternative route to becoming teachers.

RECOMMENDATIONS

For this new effort to establish viable New Careers Programs there are several elements that eligible recipients need to address and incorporate in their applications. One of the most critical is not contained in the recommended contents for the application: All applications should contain special plans for making the model New Careers Program part of the permanent structure in the department of teacher education. Without these assurances these model programs will disappear when the federal resources end. And we will once again find ourselves looking to the past for solutions to current problems.

This is an ideal time for articulation agreements between two and four college systems to be reassessed since teacher education programs across the country are in a state of change. They are (re)designing curricula, revising and creating new undergraduate admission requirements to professional schools of education, and developing new graduate degree levels. Further, many are developing pro-active strategies for recruiting and maintaining minority candidates in the field. By evaluating and, possibly, restructuring these articulation agreements, it may be possible to remove one obstacle that stands in the way of paraprofessionals who want to become teachers.

This subcommittee is herewith adjourned.

[Whereupon, at 11:40 a.m., the subcommittee was adjourned.]

EXCELLENCE IN TEACHING ACT

FRIDAY, MARCH 2, 1990

U.S. SENATE,
SUBCOMMITTEE ON EDUCATION, ARTS AND HUMANITIES, OF THE
COMMITTEE ON LABOR AND HUMAN RESOURCES,
Washington, DC.

The committee met, pursuant to notice, at 10 a.m., in room SD-430, Dirksen Senate Office Building, Senator Claiborne Pell (chairman of the subcommittee) presiding.

Present: Senators Pell, Simon, Kassebaum and Cochran.

OPENING STATEMENT OF SENATOR PELL

Senator **PELL**. The Subcommittee on Education, Arts and Humanities will come to order.

Today we will conclude our hearings on the two teacher bills, S. 1675 and S. 1676. This is the fifth hearing on these bills introduced by Senator Kennedy, our chairman and by me. I am delighted to have some of my colleagues here to testify on this issue.

Senator Bingaman, your proposal to establish a commission to study the feasibility of extending the school year is of particular interest to me. I have pursued this issue for a good many years. Time and again I have asked groups of high school students if they feel fully challenged by the school work before them. I usually get the same negative response; they feel they can absorb a lot more than they are being fed, that they are not being fully challenged. I am convinced that the students of this Nation can absorb a great deal more information than they are presently receiving. However, the idea of extending the school year is a very complex one. It would involved modification of facilities, revisions of curricula, and above all a substantial increase in teacher pay. The proposal to establish such a commission to look at these and other issues is a good one and we may want to have an additional, separate hearing just on this one topic.

I would first call, if I could, on Senator Bingaman for his statement. The administration will forgive me, but the Senators have to move on to committees that they are chairing. Senator Bingaman.

STATEMENT OF HON. JEFF BINGAMAN, A U.S. SENATOR FROM THE STATE OF NEW MEXICO

Senator **BINGAMAN**. Thank you very much, Mr. Chairman. I appreciate the opportunity to testify before your committee and, of course, appreciate the leadership that you provide on all of these issues to improve education.

Let me mention that we have two bills that are pending in your committee. One of them relates to a national report card. I understand that that will be considered at a later time by the committee. That is S. 2034. I do have written testimony I will put in on that. But the one that you wanted oral discussion of today, as I understand it, is S. 2035, which is the one to establish a commission to look at a longer school year and possibly a longer school day.

Mr. Chairman, I know that this is an issue that you have championed for a long time. I have had the opportunity to discuss that with you and am well aware of your commitment to moving the country in that direction. I do think that it is an interesting debate that I believe we need to have at the national level, on how long a school year we need as a country and whether or not the length of time that we actually instruct our students is adequate to get us where we want to be.

I noticed in the President's State of the Union address and in the governors conference this last week their commitment to very ambitious goals, one of which of course is that we are going to be first in the world in math and science achievement among our students by the year 2000. I point out that getting from where we are today to that point is not going to be easy. I think that the American people need to realize that the testing that has been done shows that the 1986 test that was done of college-bound high school seniors from thirteen industrialized countries showed American students 9th in physics, 11th in chemistry and last in biology out of the 13 countries.

Among the 20 industrialized and less developed countries, the U.S. students were 10th in arithmetic, 12th in algebra, 16th in geometry, and 18th in ability to use measurements. The Japanese students ranked first in all of these categories.

So, it is not an insignificant improvement that the President and the governors are talking about. Very quickly, I think we need to get on to the question of how do we get from here to there.

Currently our students do spend less time actually being instructed in school than students in other countries. The periods of time, when you look at South Korea, the average school year is 220 days; Japanese students, over 240 days; European students, many countries spend 230 days a year in class.

I think it is certainly cause for us to rethink what we are doing as a Nation.

This is not an original idea, as you well know, the National Commission on Excellence in Education came out with its report, "A Nation at Risk." They recommended in 1983 that we adopt a 7-hour school day, that State legislatures adopt that, and that States individually move to 200 to 220 days of instruction.

Unfortunately, we have not seen a significant amount of progress on either of those recommendations since 1983. I think the question is why. I believe that it is for a couple of obvious reasons, I would cite three reasons.

First of all, it is my firm belief that in order to make this kind of change to a longer school year we need national leadership on the issue, and we just have not had that. We live in a national economy. We have countless corporate and personal decisions, whether it is television programming, vacation planning, the outline of textbooks, all of those are geared to the relatively short school year that we continue to have. It is not reasonable to say that it is up to each individual State or within each individual State it is up to each individual school district to decide whether it wants to change.

We need national leadership if we are going to make this kind of change.

Second, unlike many proposals in education such as full funding for Head Start, which everybody seems to agree with, it is just a question of getting it done, this is a proposal that draws strong opposition from an awful lot of people in and around education. Students that I have talked to in my State hate the idea. Many summers employers do not take kind to the notion. Many teachers, many school administrators think this is certainly a very low priority concern and lacks merit.

I think clearly it is something that is controversial. That does not mean that it is unimportant.

The third and final reason I would cite as to why we have not made progress on this is that I remember reading the Effective Executive by Peter Drucker, and he makes a very good point in there, which gives advice to executive. He says do first things first and second things never, essentially saying that you have got to prioritize what you are going to spend your time on and work away at that. Well, we have deluded ourselves, I believe, in the country by saying that first we need to improve the quality of education and then we can consider whether or not we need additional time; so, until we get the quality where we want it, we do not need to seriously consider this kind of a change. I think that that thinking is misguided because it fails to take into account the fact that the length of instruction, the amount of instruction, the length of the school year does impact on the quality in a very direct way.

I think the Ford Foundation studies have shown very convincingly that at-risk students who receive very minimal, if any, parental encouragement in their education suffer very greatly from the lost time between late May when school lets out and early September when it starts up in many of our school district. I think the studies show that that 3 month recess is a major cause of those at-risk students falling further and further behind other students in the system.

I think it is crucial that we do this. The legislation I have introduced merely establishes a national commission, gives them 1 year, tells them to hold hearings around the country, to get this debate going, in a very genuine sense, determine whether they believe a longer school year or longer school day is required, and then also report to the Congress, the President and the governors as to how the cost of this would be borne if it is going to happen, and what is the appropriate role for the Federal Government in bringing this about if it is an appropriate thing in their view to happen. I think all of those are very important issues, and they are ones we need to get on with.

I think we have not given this proposal serious attention during the 1980s, I think it is time we did. Hopefully, this legislation, which you, Mr. Chairman, are cosponsoring, will allow us to give it that serious consideration.

Thank you very much for allowing me to testify. I will be glad to answer any questions if you or Senator Cochran have questions.

Senator PELL. Thank you very much indeed, Senator Bingaman. Without objection, your prepared statement will be inserted into the record at this point.

[The prepared statement of Senator Bingaman follows:]

PREPARED STATEMENT OF SENATOR BINGAMAN

Mr. BINGAMAN. Thank you Mr. Chairman for scheduling this hearing today on these important education issues. Your continuing leadership in this area is greatly appreciated by me and all those concerned with education. I am pleased to have this opportunity to testify today on two pieces of legislation which I have sponsored, S. 2034, the "National Education Report Card Act of 1990" and S. 2035, the "200 Day School Year Study Act of 1990." I appreciate your timely attention to the issues addressed in these bills.

S. 2034, THE NATIONAL EDUCATION REPORT CARD ACT OF 1990

Let me first address the "National Education Report Card Act." This week the nation's governors adopted an ambitious set of national education goals intended to "ensure that Americans are prepared to participate effectively in the workforce and in an internationally competitive economy, take part in the nation's democratic institutions, and function effectively in increasingly diverse communities and states and in a rapidly shrinking world."

The governors explicitly recognize that national education goals will be meaningless unless progress toward meeting them is measured accurately and adequately, and reported to the American people. In a section on assessment, the administration and governors said they "agree that while we do not need a new data-gathering agency, we do need a bipartisan group to oversee the process of determining and developing appropriate measurements and reporting on the progress toward meeting the goals."

The legislation before us today, S. 2034, establishes an independent council of highly respected, bipartisan experts to assess progress towards national education goals and to issue an annual report card on our achievements. I believe that this National Council on Educational Goals can serve the need identified by the governors.

This bill is the result of hearings held last year by the Governmental Affairs Subcommittee on Government Information and Regulations, which I chair. In these hearings, which focused on the quality and use of U.S. education information, we found widespread agreement that national goals will have little meaning unless we are able to assess where we currently stand and to measure our progress in attaining each goal and objective. We must have sustained, professional and independent attention to measuring progress and reporting on results.

While realistic assessment of educational attainment is heavily dependent on the quality, focus and availability of U.S. educational statistics and information gathering efforts, we found major problems with the scope, quality, comparability and timeliness of data on educational performance.

The mechanisms to assess and monitor educational progress and the national information infrastructure to support those mechanisms do not exist. The National Center for Education Statistics, the primary source of Federal data on American education, has long been underfunded in comparison to other general purpose statistical agencies. Major reviews of the quality of educational information conducted by the National Academy of Science and by the General Accounting Office both identified major problems with the independence, the quality and the level of effort of the Center.

While there are encouraging signs of progress in the past several years, much remains to be done. There are still a number of critical areas, including some of the goal areas identified by the governors, where we have virtually no information that can be used to measure progress. For example, we have very little data about education that takes place outside of the public school system whether in pre-school, post-secondary school, private school or in the workplace.

Relatedly, the subcommittee heard that the major vehicle for assessing the achievement of our Nation's students, the 20-year old National Assessment of Educational Progress, still "tells us woefully little about the things that matter most . . . how much and how well our children are learning . . ." This assessment program is currently limited in the subjects covered, omitting for example, foreign languages; in the assessment format, relying too heavily on "multiple choice" formats; and by prohibiting comparisons below the state level. Again, improvements are underway, but more needs to be done.

The Secretary of Education has, for the past few years, issued a "Report Card" on educational performance in the form of a wall chart showing state-by-state SAT scores. One witness characterized this as "mischievously inadequate as a report card on the Nation's schools" because the SAT is a totally inappropriate instrument. The SAT was created 60 years ago to be school proof and teacher proof; to measure innate ability of students, not their achievement.

The subcommittee hearings produced significant support for establishing an independent Council of highly respected, bipartisan, diverse experts to consider and adopt national goals, capitalizing on the momentum generated by the "Education Summit" and other on-going goal setting activities. The Council would also be required to study, make recommendations, and report on the status of the Nation's educational assessment system. In the words of its primary proponent, Dr. Ernest Boyer, the Council's task would be to develop a model assessment program for the Nation's education system and report periodically to the President and the Nation.

The "National Report Card Act" reflects these recommendations and concerns. It establishes a National Council on Educational Goals composed of highly respected, bipartisan experts to study, make recommendations regarding, and periodically report on the status of the nation's educational achievement, from pre-school through post-secondary education. During its first year, the council will be charged with two major tasks. It will:

1. Analyze existing information on the educational achievement of U.S. students and schools; and

2. Develop and begin monitoring a comprehensive set of national goals that will help ensure excellence in education at all levels by the end of this decade.

Following the initial report, the council will be required to issue annual "Report Cards" on U.S. educational attainment. Each Report Card will:

1. Assess Progress toward or attainment of the national goals;
2. Identify gaps in existing data and make recommendations for improving the methods and procedures of assessing educational attainment; and
3. Based on input from interested and knowledgeable parties, make revisions in the national educational goals or identify new educational goals.

NAEP

I believe it will also be necessary to make some changes in the National Assessment of Educational Progress to permit it fulfill its role in the assessment of national education goals. While the current bill does not address needed NAEP changes, I intend to introduce separate legislation to ensure that the National Assessment provides a fair, accurate, and timely presentation of educational achievement and that limitations on its coverage be examined.

I note that the President has requested expanded funding for the National Assessment in his budget proposals. However, according to our subcommittee witnesses, significantly more resources will be required if the National Assessment is to serve as the basis for monitoring our educational progress. While the resources required for the National Council on Educational Goals are estimated at a relatively modest $500,000 annually, we will need to authorize somewhere between $105 and $150 million to expand and improve the NAEP.

I believe that no issue is of greater consequence to our nation's future than the performance of our educational systems. The National Report Card Act addresses the critical area of how we establish national performance goals for our students and schools and monitor our progress toward those goals.

S. 2035, THE 200-DAY SCHOOL YEAR STUDY ACT

Mr. Chairman, I would also like to discuss with the committee, S. 2035, the 200-Day School Year Study Act of 1990. I am very pleased that you, Mr. Chairman, are an original cosponsor of this bill, along with Senators Mitchell, Kennedy, Mikulski, Harkin, Hatfield, Byrd, and Kohl.

As I mentioned earlier, this week the National Governors Association set forth six education goals for the nation. Last month, the President did the same in his State of the Union Address. Both sets of goals are commendable, and among them is the goal to make our students first in the world in math and science achievement by the year 2000. Mr. Chairman, we have a long way to go if we are to achieve that goal in the next 9 years. According to international comparisons, our students currently rank near the bottom in science and mathematics. For example, a 1986 study of college-bound high school seniors in 13 industrialized countries reported that

American students were ninth in physics,11th in chemistry, and last in biology. Among 20 industrialized and less-developed nations, U.S. students ranked 10th in arithmetic, 12th in algebra, 16th in geometry, and 18th in measurements. Japanese students ranked first in all of these categories.

Obviously, the road ahead is a long one. We must make some dramatic changes and improvements if we are going to surpass—or even meet—the rest of the industrialized countries of the world. Many of the changes to be made might be construed as painful ones. One that we must make, I believe, is a move to a longer school year and possibly a longer school day.

Currently, U.S. students spend considerably less time on educational instruction than do students in other countries. In my home state of New Mexico, as with most states, the average school year lasts about 180 days. In comparison, the school year lasts 220 days in South Korea. Japanese students attend school 243 days a year. European students spend up to 230 days a year in class. German and British schools start in early September and extend through mid-July.

Even if we assume that the quality of education in all other respects is comparable—and we know in many cases that it is not—is it any wonder that our children lag behind their peers? I believe we must close these gaps. If we do not, the educational and competitive gaps will continue to widen, and the actualization of our noble education goals will seem further and further from reality.

Mr. Chairman, I am not alone in my support for a longer school year. Seven years ago, the National Commission on Excellence in Education recommended in its landmark report, "A Nation At Risk," that school districts and state legislatures adopt 7-hour school days and academic years of 200 to 220 days. Since then, many other reports have made similar recommendations. Yet we continue to resist. Why? I believe that school districts and states have resisted such a move for three obvious reasons.

First, this is the type of change that requires national leadership, and we simply have not had it. Ours is a national economy, and countless corporate and personal decisions—from television programming to vacation planning—are based upon expectations involving the length of the school year. Text books are written for shorter school years. An individual school district or even a state would be hard pressed to go against this tide and significantly lengthen the school year on its own.

Second, unlike many proposed educational reforms, such as full-funding for the Headstart program, this proposal is the object of strong opposition by people closely involved in our current education system. Students hate the idea. Summer employers balk at the idea of a lost source of cheap labor. Most teachers and school administrators are opposed to it. Although some educators concede that it would be acceptable if salaries for educators were raised to compensate for the additional work load, many are skeptical that higher salaries actually will accompany the increased instruction time.

Third, I believe that we have misapplied Peter Drucker's admonition to the "Effective Executive" that priorities should be for "first things first and second things never." We spent the 1980s telling ourselves that we must first dramatically improve the quality of education, and only then should we consider the length of instruction. The argument I have heard repeatedly since introducing this bill is that it does not further a student's education to be in school longer if the quality of education is poor.

But this argument fails to take into account the fact that the length of the school year may be a significant determinant in the quality of education. Ford Foundation studies have shown convincingly that "at risk" students who receive minimal parental encouragement suffer adversely from the "lost time" between the end of school in late May and the beginning of school in September. The studies report that a 3-month recess is a major cause of their falling behind other students.

Mr. Chairman, improvements in our children's educational achievement levels will not happen in the 1990s merely because we wish it so. If U.S. students—all of our students—are to excel within the next 9 years in the math and sciences, we must provide leadership. I believe that S. 2035 does that.

The 200-Day School Year Study Act of 1990 is a straight-forward attempt to help states determine the advisability and feasibility of lengthening school days and years, increasing teacher salaries correspondingly, and thus increasing our children's chances for gaining a quality education. The study mandated under the Act could be a first step toward the noble goals set forth by our nation's governors and the President.

Under this bill, a 12-member commission of experts, including teachers, parents, state education officials, and representatives from education organizations, would make specific recommendations to the President, the Congress, and the nation's governors regarding:

(1) The advisability of establishing a model "length of school day and school year" for U.S. public schools;

(2) The feasibility of determining an appropriate minimum number of hours per day and days per year of instruction for U.S. public schools, and a model plan for reaching those numbers, and compensating teachers accordingly, before the end of the decade;

(3) An estimate of the average additional costs, including the additional cost in terms of teacher salary enhancement, that states and local districts would incur if longer school days and years are adopted, and a model plan for meeting the additional costs.

The Commission's first report, due one year after the date of the Commission's first meeting, would include its recommendations for administrative and legislative action.

I hope the subcommittee will favorably consider this measure, and I am very appreciative of your support, Mr. Chairman. Thank you.

THE NATIONAL EDUCATION REPORT CARD ACT OF 1990

I. *NATIONAL COUNCIL ON EDUCATIONAL GOALS:*

The bill will establish a 12-member (9 voting, 3 ex-officio) council of highly respected, bipartisan experts to study, make recommendations regarding, and periodically report on the status of the nation's educational achievement, from pre-school through post-secondary education.

A. VOTING MEMBERS: Voting members will serve terms of six years. Initial appointments will be made by the President, in consultation and upon agreement with the National Governors Association. The council will be self-perpetuating, and all future appointments will be made by current council members. All appointments will be subject to the advice and consent of the Senate.

B. *Ex-Officio Members:* The Secretary of the Department of Education, the Chairperson of the National Governors Association and the Chairman of the National Assessment Governing Board will serve as ex-officio members.

II. *ANNUAL REPORT CARDS:*

A. *Council Report:* During its first year, the council will be charged with two major tasks: It will:

1. Analyze existing information on the educational achievement of U.S. students and schools; and
2. Develop and begin monitoring a comprehensive set of national goals that will help ensure excellence in education at all levels by the end of this decade.

B. *Annual Report Card:* Following the initial report, the council will be required to issue annual "Report Cards" on U.S. educational attainment. Each Report Card will:

1. Assess progress toward or attainment of the national goals;
2. Identify gaps in existing data and make recommendations for improving the methods and procedures of assessing educational attainment; and
3. Based on input from interested and knowledgeable parties, make revisions in the national educational goals or identify new educational goals.

200-DAY SCHOOL YEAR STUDY ACT OF 1990

I. *BACKGROUND:*

In the words of the 1983 report of the National Commission on Excellence in Education, we are "A Nation At Risk." The problems plaguing America's educational system were outlined in that report, which found 6 years ago that American students spent less time on school work than their international counterparts and, as a result, lagged behind them in testing and achievement rates. Currently, most U.S. school years last about 180 days. In comparison, European students spend up to 230 days a year in class; South Koreans spend about 220 days a year in school; and Japanese students attend school 243 days per year.

II. *NATIONAL COMMISSION:*

A. *Report:* Under this bill, a 12-member commission of experts would make specific recommendations to the President, the Congress, and the nation's governors regarding:

(1) The advisability of lengthening the school day to a predetermined minimum number of hours and the school year to at least 200 days in U.S. public schools;

(2) The appropriate number of hours per day and days per year of instruction for U.S. public schools, and a plan for reaching those numbers before the end of the decade;

(3) an estimate of the average additional costs that states and local districts would incur, including an appropriate increase in teacher compensation, if longer school days and years are adopted and a plan for meeting any additional costs.

The Commission's final report, due one year after the date of the Commission's first meeting, would include its recommendations for administrative and legislative action.

B. *Commission Membership:* The commission would consist of 12 members, four to be appointed by the President, two by the Speaker of the House, two by the Minority Leader of the House, and four by the President pro tempore of the Senate (two from each political party).

The members would be appointed based upon their exceptional education, training, and experience. The membership will include:

(1) Representatives of non-profit organizations committed to the improvement of American education;

(2) Teachers;

(3) Parents; and

(4) State officials directly responsible for education.

Senator PELL. Thank you very much. One of the few times that I recall being booed was at an education group when I suggested this idea. It has got merit. We have as of now 180 days a year of vacation, 180 days roughly of school. I think that instead we could have three-quarters of the year spent in school and one-quarter on vacation, that would seem adequate. So, I would hope that the idea of

200 days is not cast in stone. I would like to see 220 days or 230 days.

Some of our main competitors, as you pointed out, have longer school years then we do: Japan, 243 days a day; Italy, 213; Israel, 216; South Korea, 220. These are just jotted down in my notebook here. Time and again, I have asked students if they feel they are being challenged adequately in school. A minority say that they are being challenged adequately. It is a majority who feel that they could absorb and be challenged a great deal more.

Thank you for coming forward with this idea in legislative form. My only hope would be that we would not think of the 200 days in cement. I would like to see more.

Senator Cochran.

Senator **Cochran**. Thank you, Mr. Chairman.

Senator **Pell**. We will insert your prepared remarks into the record, without objection, and Senator Kennedy's.

[The prepared statements of Senators Kennedy and Cochran follow:]

Prepared Statement of Senator Kennedy

Senator **Kennedy**. Enhancing the status and attractiveness of the teaching profession must be our top priority in our quest for education reform. We must find new ways to attract teachers into the profession, prepare them to meet the challenges of today's classroom, and retain our best teachers in the schools so future classes of students may benefit from their talents. At the present time, we are not doing a good enough job. Recently revised data from the education department paint an even bleeker picture of teacher shortages than we had previously thought: Between 1990 and 2000, almost 2.2 million new teachers will have to be hired by public school systems. This means that almost as many new teachers will have to be hired as are currently employed in public schools.

The Senate is considering several initiatives in this area, including two which are the subject of today's hearing: "The Excellence in Teaching Act" and "The National Teacher Act of 1989." We are delighted to have three colleagues in the Senate with us this morning, as well as representatives from the education department and the National Science Foundation. We have worked closely with NSF in developing the math and science initiatives in the "Excellence in Teaching Act," and look forward to their presentation. We also welcome other distinguished witnesses: The Lieutenant Governor of Utah, and the Commissioner of Education from Rhode Island. We thank you and our other witnesses for being here. Many of you have travelled considerable distance to join us, and I know we will benefit enormously from your remarks.

Once again, I commend my colleague, Senator Pell, for holding this informative hearing. This will be our final hearing on the issue of teacher reform. The Subcommittee on Education, Arts, and Humanities, and the Committee on Labor and Human Resources will have held five hearings this Congress on this issue. We are prepared to move ahead and look forward to reporting these measures out of committee later this month.

PREPARED STATEMENT OF SENATOR COCHRAN

Senator COCHRAN. Mr. Chairman, I am pleased to welcome Assistant Secretary Haynes and the other distinguished witnesses on the agenda today.

President Bush has said, "education can be our most powerful economic program, our most important trade program, our most effective urban program, our best program for producing jobs and bringing people out of poverty."

I believe this and I know all of you do too. Education holds the key to the future of our country. If we fail to provide quality education programs, we risk not only the lives of our children but also our Nation's place in an increasingly competitive work place.

But, we won't have a first-rate educational system without first-rate teachers. At previous hearings on the Excellence in Teaching Act and the National Teacher Act we have heard compelling testimony from witnesses regarding teacher shortages, problems in retaining our best teachers, the need for more minority teachers and the need for better staff development programs. Both S. 1675 and S. 1676 take positive steps to address these issues. These bills provide thoughtful incentives to enhance the professionalism of teaching, to attract more minorities into the field and to give teachers the opportunity to enhance and improve their teaching skills through career-long learning programs.

I am pleased to be a cosponsor of both bills.

Mr. Chairman, I would also like to thank you and Senator Kassebaum and other Members of the committee for joining me in introducing legislation that I hope will be incorporated into the teacher bill that will ultimately be adopted by the subcommittee.

On January 30, I introduced S. 2039, the National Student Writing and Teaching Act of 1990, to authorize funding for the National Writing Project. The National Writing Project is a national network of teacher training programs affiliated with institutions of higher education to improve the quality of student writing and learning and the teaching of writing in the Nation's classrooms. There are currently 143 National Writing Project sites in 44 states. S. 2039 would provide Federal funds to be used to support the programs at each of these sites and to develop new sites on a dollar-for-dollar matching basis. As of today, there are 25 cosponsors of this legislation.

The Writing Report Card, an assessment of writing skills of school-aged students conducted by the U.S. Department of Education, recently reported that in 1988 fewer than 25 percent of our high school juniors could not write an adequate, persuasive letter, and most of those were filled with numerous errors.

Over the past two decades, colleges and universities across the country have reported increasing numbers of entering freshmen who are unable to write at a level equal to those demands. Over ninety percent of our postsecondary institutions currently offer remedial courses to improve the basic skills of entering students.

Business and industry leaders have testified on numerous occasions that they are concerned about the limited basic skills of entry level workers.

In addition, the lack of writing ability has been recognized as a key element of the adult illiteracy problem in this country.

The National Writing Project is a teachers-teaching-teachers program that identifies and promotes what is working in the classrooms of the Nation's best teachers. It is a positive program that celebrates good teaching practice and through its work with schools increases the Nation's corps of successful classroom teachers.

In Mississippi, National Writing Project sites have made remarkable progress in improving the quality of teaching and student learning in the State. Not only English teachers but history, geography, math, reading, science and elementary school teachers participate in the program. The result has been a measurable increase in student test scores and a rekindling of teacher enthusiasm, confidence and morale.

At today's hearing, on the next panel, there is a witness from the Bay Area Writing Project in San Francisco, Mary Ann Smith, who will be discussing the successes of the National Writing Project. Mr. Chairman, I hope that you and other Members of the committee have an opportunity to carefully review the statement for the record prepared by the National Writing Project so that you can see the honors and recognition they have received over the past 17 years.

But, before we get to that, I would like to take a moment to recognize two people in the audience who have been a tremendous help to me in developing this legislation. Dr. James Gray, who is the director of the National Writing Project and Sandra Burkett, who is the director of the Mississippi Writing and Thinking Institute at Mississippi State University.

Thank you, Mr. Chairman. I look forward to hearing from the witnesses.

Mr. Chairman, I want to commend Senator Bingaman for his leadership on this issue. If I had realized that this was so unpopular, I would not have asked to be added as a cosponsor, but I did not know you——

Senator BINGAMAN. We appreciate your strong support for this, Senator Cochran.

Senator COCHRAN. Well, I will give you a lot of quiet support, how about that? We can build a consensus around the country.

Thank you for coming and letting us know more about your ideas.

Senator BINGAMAN. Thank you.

Let me just comment in reference to the chairman's point there. I agree totally that we do not want to prejudge the length of time that students should be in school before this commission gets a chance to make its findings and recommendations. It is very possible that 200 days is not the right length of time, but something in that direction I think is appropriate to look at.

I think we made clear in the legislation that we would like them to look at the question of whether we should go to 200 days or more and also whether we should have a longer school day.

Senator PELL. I would also add here that this proposal assumes a proportionate increase in salary recompense for teachers, because it would not be fair to extend their workload without that increase. My support for it depends on that recompense.

Senator **Bingaman**. I understand that. And I agree that there will be additional costs, and there needs to be additional compensation to people in the education community if this kind of a proposal is implemented.

Senator **Pell**. Adequate recompense in proportion to the increase in school year.

Thank you very much for being with us.

Now I will turn to Senator Bumpers, who has his humanities education bill. I will be glad to hear from you, Senator.

STATEMENT OF HON. DALE BUMPERS, A U.S. SENATOR FROM THE STATE OF ARKANSAS

Senator **Bumpers**. Thank you, Mr. Chairman and Senator Cochran, for allowing all of us to come here for what I consider to be a very important hearing.

First of all, Mr. Chairman, I envy you. If I could be made chairman right now of any committee or subcommittee in the United States Congress, my preference would be to chair this subcommittee. I think that the work that we do in the other committees, while they are all important, absolutely nothing and particularly today nothing compares to the monumental problems of this country to education. This subcommittee is in the cat bird seat and can direct and be a traffic cop for all these many bills that people like Senator Bingaman and I have introduced and feel very strongly about. So I thank you again.

My bill, Mr. Chairman, is something that I call "The Humanities Education Bill." Like Senator Bingaman, my whole interest in this subject as well as education came when I read "A Nation at Risk" and all the different report cards on education in this country that began to come out at about that time. Quite frankly, that was in 1983, and that was when I entered this bill.

I have been introducing this bill now, this is the fourth Congress that I have introduced this bill. I really feel strongly that it is an idea whose time has come and hopefully will be incorporated into yours and Senator Kennedy's legislation.

When I read A Nation at Risk, I was shocked to learn about all these statistics that we keep seeing coming out. Seventy-five percent of the 11th graders surveyed did not know that Abraham Lincoln was president between 1860 and 1889. Four-fifths of them did not know what the Reconstruction period was. Seventy percent of them did not know what the Reformation was. And I recently read about the weak reading and writing skills of students. Almost six of ten students of age 17 cannot read at a level of difficulty equivalent to newspaper editorials, and 72 percent of 11th graders cannot write a persuasive letter urging a Senator to support the space program.

And these do not even begin to cover other crises facing schools, including the fact that in many areas more students are dropping out than are finishing or that thousands of students who graduate from high school are illiterate.

Mr. Chairman, the quickest way to improve America's schools is to keep good teachers in the classroom and improve their skills and knowledge.

Senator Cochran, if you want to get on something that is popular with the teacher, this bill is.

There is obviously a need for competitive salaries for teachers, a need to recruit more minority teachers, a need to improve the supply of fully qualified math and science teachers. But I believed in 1983 and I believe today that a lot more can be done to help those teachers already in the work force.

One teacher said after she participated in a program—and incidentally, my curiosity about this whole concept came from an article in *Time* magazine in 1983, where I read that the National Endowment for the Humanities and the Mellon Foundation were cooperating in setting these summer seminars for teachers. After one of the teachers finished one of the seminars, I think at the University of Texas, and I will come back to that in just a moment, she said: it is easy to build a wall around yourself and teach students a certain way year after year. I think we will all go home much better teachers because our excitement about the materials that we got here will be communicated to the kids.

Another teacher said: In this program, high school teachers are recognized as having scholarly interests.

What stronger endorsement could we get? Here, for example, is the one that piqued my curiosity that I was interested in. It was at the University of Texas, and here is what they taught: Homer's "The Iliad" and "The Odyssey"; Vergil's "Aeneid"—and, incidentally, from those two classics come the difference between really sort of democracy and tyranny, where man is supreme and the other, the State is supreme. They studied Shakespeare, "de Tocqueville," Tolstoy's "War and Peace." Almost 2,300 teachers—if you want to know how badly teachers want to improve their skills, listen to this, Mr. Chairman. Almost 2,300 teachers applied for that one seminar at the University of Texas for 225 places that were available.

Despite the excellent work that the National Endowment does, it obviously cannot administer this program the way I envision it.

For the last several Congresses, I have been trying to make this point, and this is really the first what I consider adequate hearing I have had on this. But I will tell you this about the legislation. The Secretary of Education would be authorized to make grants to colleges, universities, community colleges and junior colleges to conduct these summer humanities institutes for elementary and secondary teachers. The grants to the institutions would include tuition, fees, administration, living expenses and stipends for participants.

There would be at least one institute in every State, under my legislation.

I believe that a mathematics teacher and his or her students could also benefit. Now, when I first introduced this bill it would only include humanities teachers; but that is nonsense, and I have since revised the bill to make it available to all teachers, science and math teachers. I learned as much from a math teacher about civics and my responsibility as a citizen as I ever learned in ninth grade civics.

Oftentimes a teacher who has this kind of knowledge just almost inadvertently shares it with students. So I see no reason to discriminate against anybody, and let all teachers participate in this.

It is also important to remember, Mr. Chairman, students benefit when they understand what makes us human and what makes us a humane society. They benefit if they share some knowledge of that. It is important to remember that it is the humanities which teach us to read, to write and to communicate with other clearly. The jobs of the 21st century are going to require strong reading and writing skills, and downplaying the humanities will weaken our students' ability to compete.

My daughter graduated from an upstate, one of those chic eastern, Ivy League type of colleges; and it did not hurt her any. But she told me that the banks in New York were hiring English majors when she graduated, on the simple proposition that they can teach anybody to be a banker but they cannot teach everybody to write.

In a memorandum to his undergraduate students at Harvard, here is what Professor Robert Reich advised: "The intellectual equipment needed for the job of the future is an ability to define problems, quickly assimilate relevant data, conceptualize and reorganize the information, make deductive and inductive leaps with it, ask hard questions about it, discuss findings with colleagues, work collaboratively to find solutions, and then convince others. To the extent (these sorts of skills) can be found in universities at all, they're more likely to be found in subjects such as history, literature, philosophy, and anthropology—in which students can witness how others have grappled for centuries with the challenge of living good and productive lives."

It is also important to remember, Mr. Chairman, the vital link between learning about our democracy and participating in it. In 1986, only 19 percent of the 18- and 20-year-olds of this country bothered to vote. In 1988, about 36 percent of the 18- to 25-year-olds voted. Young people in this country are cavalier about the privilege of voting because they are ignorant of our history and how we became a democracy. They generally lack insight into the struggles leading up to the Revolutionary War, the history of the Civil War, the sacrifices of their grandparents during the Second World War, or the struggles, domestic and international, caused by the War in Vietnam.

Samuel Gammon of the American Historical Association said, in commenting on the State of history teaching in this country: "Our citizens are in danger of becoming amnesiacs if you maintain that history is collective memory." I fear, Mr. Chairman, that young Americans are already amnesiac about the responsibilities of citizenship, the importance of each man and woman voting whenever he or she has that opportunity.

When I speak to high school students and they say, "I hate history," I say: "You have a lousy history teacher." Thomas Jefferson, in justifying the inclusion of the study of history in his plan for education, said this: "History, by apprising them of the past, will enable them to judge of the future; it will avail them of the experience of other times and other nations; it will qualify them as judges of the actions and designs of men; it will enable them to know ambition under every disguise it may assume; and knowing it, to defeat its views."

Nothing else matters, Mr. Chairman, not rising SAT scores, more science majors, or even international enhanced competitiveness if our young people cannot carry on the ideals of democracy.

I feel as strongly about accountability in education as any of my colleagues. My bill will probably be criticized because it is not sufficiently targeted, because it will not pay off in the short term to teach a math teacher about Shakespeare or a science teacher on how the Constitution came to be. I do not think the results of seminars I propose will be easily quantifiable, at least not in the short run, but I cam convinced that these seminars will make an immediate difference in the lives of teachers and will finally make a difference in the quality of education of American students.

Finally, Mr. Chairman, in 1989 an annual poll showed that among high school seniors the ten most admired persons in America were Larry Bird, Eddie Murphy, Oprah Winfrey, Michael Jordan, Arnold Schwarzenegger, Jesse Jackson, Bill Cosby, Patrick Swayze, Oliver North, and Mike Tyson. I do not denigrate any of those people. They are all successful in their chosen fields. But I must say that I am dismayed that President Bush was not on the list. The Pope was not on it. Mother Theresa was not on it. Poor old mom and pop did not even make the list.

I am convinced that the real heroes of the Nation will never be on the list unless my bill or something akin to it catches fires. Probably 99 percent more youngsters admire Prince than Pavarotti, Bruce Springsteen rather than Izthak Perlman. Who is Madame Butterfly? Who cares?

The summer seminar programs proposed in your bills are more ambitious than the program I propose, but I strongly urge you to focus on the humanities. I sincerely hope, Mr. Chairman, that this bill will be incorporated as a pilot program at least in your legislation.

Senator **Pell**. Thank you very much indeed. Also, as an element of hope here, we are conducting the reauthorization hearings on the Endowments in Humanities and Arts over the next few months, and this could also tie in there.

Your prepared statement will be inserted into the record, without objection.

[The prepared statement of Senator Bumpers follows:]

STATEMENT OF SENATOR DALE BUMPERS
ON HUMANITIES EDUCATION

Mr. Chairman, I thank the Subcommittee for the opportunity to speak before you today on humanities education. Before I begin speaking about the legislation which I am sponsoring and about which I feel so deeply, I want to take this opportunity to applaud the Chairman and Senator Kennedy for your outstanding teacher education initiatives. I am proud to cosponsor both of them and believe that this is the Congress that can take major strides in improving the preparation, retraining, and retention of teachers in American classrooms. I am very pleased to be with friends.

The thrust of my legislation is in many ways similar to certain provisions of the teacher training bills you are sponsoring. We all agree that in-service or continuing education opportunities must be made available to teachers who are currently in the classroom. My legislation on humanities education, however, contains a very important difference.

I want to present a brief history of the bill which I call "The Humanities Education Bill."

When I read the "Nation at Risk" report in 1983, my reaction was similar to that of my colleagues: dismay that our students were performing so poorly and that our educational system was so troubled. And the dozens of major national reports on education and the "report cards" on American students issued by the National Assessment of Educational Progress since the "Nation at Risk" report have done little to allay my fears about American education.

I am shocked, for example, to learn that 75% of eleventh graders surveyed did not know that Abraham Lincoln was president between 1860 and 1889; that four-fifths of the students did not know what the Reconstruction period was; and that 70% of students did not know what the Reformation was. And I recently read about the weak reading and writing skills of students. Almost six of 10 students at age 17 cannot read at a level of difficulty equivalent to newspaper editorials, and 72% of 11th graders can't write a persuasive letter urging a Senator to support funding for the space program. And these statistics don't even begin to cover other crises facing our schools, including the fact that in many areas more students are dropping out than are finishing high school or that thousands of students who graduate from high school are illiterate.

My reaction to the crisis in American education -- to the crises in rural schools and inner city schools -- has been the reaction of a small town school board member and former Governor. I have tried to build from the strength of the American educational system, the classroom teachers. The quickest way to improve American schools is to keep good teachers in the classroom and improve their skills and knowledge. There is obviously a need for competitive salaries for teachers, a need to recruit more minority teachers, and a need to improve the supply of fully-qualified math and science teachers. But I believed in 1983, and I still believe today, that much more can be done to help those teachers already in the workforce.

I didn't have to look far in 1983 to find a model of teacher training that was a proven success and which could be easily replicated. In the summer of 1983 I read a short article in Time magazine about a summer seminar program for secondary school teachers of the humanities. Teachers chosen for the program were given stipends to go to college campuses during summer months, where they enrolled in rigorous academic courses taught by college professors. The aspect of the program that struck me most was the enthusiasm expressed by the teachers who were fortunate enough to participate in the seminars. The teachers lauded the program for its intellectual rigor and for the recognition it gave them and their profession. One teacher said, "It's easy to build a wall around yourself and teach students a certain way year after year. I think we'll all go home much better teachers because our excitement about the material will be communicated to the kids." Another said, "In this program, high school teachers are recognized as having scholarly interests." No stronger endorsement could have been given the summer seminars than the endorsement by those teachers.

This program, funded and administered by the National Endowment for the Humanities, allowed a select few teachers to go to college campuses for six-week summer seminars. The seminar topics in that first summer of the program at the University of Texas included Homer's The Iliad and The Odyssey; Vergil's

Aeneid; Shakespeare; Alexis de Tocqueville; and Tolstoy's War and Peace. Almost 2,300 teachers applied for the 225 places available in in the first year of the program.

As a member of the Appropriations Committee, I sought to expand the NEH sponsored program by increasing the agency's funding for teacher training. Despite the excellent work the NEH does in its seminar programs and other teacher education efforts, the agency has not indicated a keen interest in administering a dramatically expanded seminar program. And at its current level of funding, NEH can reach only a fraction of the teachers who would benefit from the seminars.

For the last several Congresses I have introduced a bill to establish a comprehensive program of summer seminars in the humanities for elementary and secondary school teachers. The bill is important because it builds on the successful NEH model and because it opens the seminars to ALL teachers. I will talk about that aspect of the legislation in just a few moments. Under my bill, the Secretary of Education would be authorized to make grants to colleges, universities, community colleges, and junior colleges to conduct summer humanities institutes for elementary and secondary school teachers. The grants to institutions would include funds for tuition, fees, administration, living expenses, and stipends for participants. The institutes would be restricted to topics in the humanities, including both modern and classical language, literature, history and philosophy, and language arts and social sciences. The bill would guarantee that each state would have at least one institute. The sponsors of the seminars would be required to involve classroom teachers in the planning and development of the seminars.

When I first introduced this legislation in the 98th Congress, only humanities teachers were allowed to participate in the seminars. I thought the seminars were a way to improve teachers' mastery of their subjects, and that they should be limited to those who taught the subjects. Since then, however, I have changed its focus by introducing an amended version to open the seminars to all teachers, not just teachers of the humanities. I believe that a mathematics teacher and his or her students could also benefit if the teacher knows something about the American Revolution, or has spent a summer reading Shakespeare. All students benefit if they share some knowledge of what makes us human. It's also important to remember that it's the humanities which teach us to read, to write, and to communicate with others clearly. The jobs of the twenty-first century will require strong reading and writing skills, and downplaying the humanities will weaken our student's ability to compete. In a memorandum to his undergraduate students at Harvard University, Professor Robert Reich advised,

> The intellectual equipment needed for the job of the future is an ability to define problems, quickly assimilate relevant data, conceptualize and reorganize the information, make deductive and inductive leaps with it, ask hard questions about it, discuss findings with colleagues, work collaboratively to find solutions, and then convince others. To the extent [these sorts of skills] can be found in universities at all, they're more likely to be found in subjects such as history, literature, philosophy, and anthropology -- in which students can witness how others have grappled for centuries with the challenge of living good and productive lives.

It's also important to recognize the vital link between learning about our democracy and participating in it. In 1986, only 19% of 18- to 20-year-olds voted; in 1988 about 36% of 18- to 25-year-olds voted. Young people in this country are cavalier about the privilege of voting because they are ignorant of our history and how we became a democracy. Young people generally lack insight into the struggles leading up to the Revolutionary War; the history of the Civil War; the sacrifices of their grandparents during the Second World War; or the struggles -- domestic and international -- caused by the war in Vietnam. Samuel Gammon of the American Historical Association has said, in commenting on the state of history teaching in this country, "Our citizens are in danger of becoming amnesiacs if you maintain that history is collective memory." I fear that young Americans are already amnesiac about the responsibilities of citizenship -- the importance of each man and woman voting whenever he or she has that opportunity. Thomas Jefferson, in justifying the inclusion of the study of history in his plan for education, said

> History, by apprising them of the past, will enable them to judge of the future; it will avail them of the experience of other times and other nations; it will qualify them as judges of the actions and designs of men; it will enable them to know ambition under every disguise it may assume; and knowing it, to defeat its views.

Nothing else matters -- not rising SAT scores, more science majors, or even increased international competitiveness -- if our young people cannot carry on the ideals of democracy.

I feel as strongly about accountability in education as any of my colleagues. I will confess, however, that my bill will probably be criticized because it is not sufficiently targeted; because it won't pay off in the short term to train a math teacher in Shakespeare or a science teacher in how the Constitution was written. I don't think the results of the seminars I propose will be easily quantifiable, at least not in the short run. But I am convinced that these seminars will make an immediate difference in the lives of teachers and will finally make a difference in the quality of education of American students.

Mr. Chairman, in 1989 an annual poll showed that among high school seniors, the 10 most admired persons in America were Larry Bird, Eddie Murphy, Oprah Winfrey, Michael Jordan, Arnold Schwarzenegger, Jesse Jackson, Bill Cosby, Patrick Swayze, Oliver North, and Mike Tyson. I don't denigrate any of those people, but I must say I'm dismayed that President Bush, the Pope, Mother Therese, Mom, Pop and a few others weren't on that list. I'm convinced the real heroes of the nation will never be on the list unless my bill or something akin to it catches fire. Probably 99% more youngsters admire Prince than Pavarotti, Bruce Springsteen than Izthak Perlman. Who is Madame Butterfly? Who cares?

The summer seminar programs proposed in S. 1675 and S. 1676 are more ambitious than the program I propose and could be seen as doing all I want to do and more. But I strongly urge my colleagues to focus on humanities education as a crucial part of teacher seminars.

Thank you, Mr. Chairman and members of the Committee, for allowing me to testify here today.

Senator PELL. I think it was George Santayana who said once that those who forget the lessons of history are condemned to repeat them. And we can see here how few know what the lessons of history are. I believe this very strongly.

In my State every high school and every college gets a little award in American history each year. I think that that has had a real impact, a small impact but an impact, one that I commend to you. Senator Cochran.

Senator COCHRAN. Mr. Chairman, thank you.

I think we have heard very persuasive testimony this morning from Senator Bumpers. I have enjoyed having the opportunity to hear him talk about why this is such an important area to emphasize in our schools. And I hope we can include some language either in these bills that we are considering or in the reauthorization for the Endowment for the Humanities that will try to deal with this more effectively than we have in the past.

Thank you very much for coming to testify before the committee.

Senator BUMPERS. Thank you.

Senator PELL. Thank you very much. Senator Simon.

Senator SIMON. I want to join in commendation. I think these summer institutes can be very helpful. We had them, interestingly, under the National Defense Education Act for a while for foreign language teachers. And you still talk to these foreign language teachers who, you know, really look back on that with great pride.

I think it does another thing, and that is it elevates the status of being a teacher. Frankly, we are going to have to pay teachers more. We are going to have to demand higher standards of teachers. We are going to have to do both things.

In Japan teachers are paid approximately the same as lawyers, doctors, engineers. Teachers are in the top 10 percent in terms of income. Teachers go into the profession for a lifetime. The average teacher in the United States stays in the teaching field six and a half years. We simply have to do much better.

Finally, one other point just ties in with what you are saying, Senator Bumpers. Harvard did a study recently on all the new audiovisual equipment in foreign language study, just to see what kind of an impact that would have. After going through all the different tests and everything, they came to this conclusion: If you have a good teacher, you are going to learn well; if you do not have a good teacher, you are not going to learn well.

That should not surprise anybody.

Senator BUMPERS. Senator Simon, if I may just give you a little personal vignette about my own life, having grown up in a poor rural area. And, incidentally, people who do not think that money matters in this, all they have to do is go to the affluent, white school districts of this country, not just white but the affluent school districts and see. And go to the inner cities and see what is happening. Money is absolutely vital to what we are trying to do here. You can talk all around it.

I can tell you that one good teacher—I hope this does not sound too contradictory—one good teacher can make more difference than all the money in the world. As I say, having grown up poor in a rural area, my father was very devoted and ambitious for me, I would not be here if it had not been for him and one high school

English teacher. One day when I was reading Beowulf, when I finished she said: you have a fine talent; it would be a terrible tragedy if you lost that and did not use it. She did more for my self-esteem in ten seconds than anybody before or since. A lot of people think she overdid it.

I am just saying that one good teacher can make all the difference in the world in students' lives. I think that this kind of thing is the kind of thing that gives teachers the sensitivity to raise people's self-esteem, to let them know that they count.

The greatest contribution that Jesse Jackson makes in this country is when he tells those children to repeat after me, I am somebody. If I were going to summarize the Constitution in one sentence, it would be that each one of us counts. That is really what this is all about.

Senator SIMON. I might add that we have a resident in Illinois who is a former teacher, Dale Bumpers, and he is very, very proud of having been a teacher.

Senator BUMPERS. Thank you.

Senator PELL. Thank you very much indeed, Senator Bumpers.

Senator BUMPERS. May we be dismissed, Mr. Chairman?

Senator PELL. Absolutely. I will turn now to Senator Boren.

Dr. Haynes is nice enough to say that he would wait for the Senators.

Senator BOREN. Thank you very much, Mr. Chairman.

Senator PELL. I welcome you here. Incidentally, in the field of education, I congratulate you on your success in persuading the administration to increase the number of exchanges.

STATEMENT OF HON. DAVID BOREN, A U.S. SENATOR FROM THE STATE OF OKLAHOMA

Senator BOREN. Thank you very much. Mr. Chairman, it has been a pleasure to work with you on that. It is something that I hope we can do even more in terms of encouraging the exchange program.

I am very glad that I had an opportunity to hear part of Senator Bumpers' testimony. I think it certainly gave us a challenge and made some points that are very important. Mr. Chairman, I think we are living through such a critical decade for this country. I am often asked as chairman of the Intelligence Committee, what is the single greatest threat poised to our national security right now? And I suppose that people expect me to talk in terms of the military threat against this country or the threat of terrorism or the threat of espionage aimed against this country, aimed against our commercial secrets as well as our military secrets. If I were to give an honest answer to that question, as to the gravest threat to our national security today, it would be that we are not fully developing the human talent in this country, that we are wasting our human resources. That is the greatest threat to the national security of this country, particularly as we look ahead at the next century.

That is what I am here today, to talk about a bill that I have introduced, S. 429, the National Foundation for Excellence Act.

We have to realize that, if we deal successfully with every other major policy area facing us and we fail to rebuild our educational system, we will eventually undermine our progress in all other areas. The plain truth is simply that a Nation that allows its educational system to become second or third rate will soon find itself a second- or third-rate Nation.

We will find that our economic strength and our ability to compete in the world marketplace will continue to erode, and a Nation that loses its economic strength will soon lose its political, diplomatic and military strength as well.

So, we are dealing with a matter of crucial importance today.

The key to rebuilding our educational system, as has just been said, is the attraction of qualified young people into the teaching profession and the retention of the best teachers already in the classroom. You can have the finest physical facilities in the world, as Senator Simon just said, all the technical capabilities in the world; but if you put a mediocre teacher in a classroom that might be in a palace of a building, you are going to have a mediocre educational experience.

It is the quality of the teacher that becomes critically important.

I often go to visit our State universities, as I am sure all of you do. Very often I am asked to address the honors students, the president's leadership class, or the group of those students who have been identified as student leaders at the college or university level. Over the past several years I do not know how many groups I have spoken to of, say, 150 or 200 of the top students at each of our State colleges and universities. During those sessions I always ask them: How many of you, the best and the brightest, the student leaders, the people that can make the greatest contribution, how many of you are considering going into teaching as a career? And I cannot tell you in how many of those meetings not a single hand goes up.

I had such an experience just about 3 weeks ago. This time I was encouraged; two hands went up out of about 175 of those best and brightest students and those student leaders. Two hands went up, almost ashamedly, as if they did not want to admit to the others of the student leaders and the scholars that were there that they might consider teaching as a profession.

Unfortunately, that experience is borne out by national studies. Research indicates that in less than two decades we have gone from having about 20 percent of our college freshmen consider teaching as a profession down to 6 percent. It is not just a drop in interest. It is where that interest has dropped. It has dropped most significantly among our best and brightest students.

Research indicates that of college students who plan to enter teaching that are in college right now, only 2 percent are in the top fourth of their class academically, only 2 percent, and more than 50 percent of those who plan to enter teaching as a profession are in the bottom one-fourth of their college class academically.

Mr. Chairman and members of the committee, I know the deep interest of all of those here this morning in what we are doing with our educational system. I do not need to tell you that, if we populate our classrooms with teachers to teach the next generation who predominately come from the bottom fourth of their classes in terms of their academic strength, we are headed for an unmitigated disaster in this country in terms of the education of the next generation, at a time in which our survival as a world leader depends upon having the best possible people in the classroom developing the talent among the students in the next generation.

So what I want to talk about this morning is not how do we get more people to go into teaching. We will always be able to attract a sufficient number of mediocre people or people who are worse than mediocre into the classroom, who cannot find a job in anything else. How do we attract more of our best and brightest students into teaching? It is critical important in terms of raising the capability of the profession, raising the prestige of the profession, that has been talked about, that we get more of our best and brightest interested in entering into teaching.

It is also key to changing public attitudes. We are in the midst of a debate in our State right now about whether we want to invest more money in education. And what do you hear so often when you go in and talk to the general public? Too many of the teachers are mediocre. I am happy to pay more to the good teachers, but I do not want to pay more just for mediocrity or worse.

So therefore people say, we are not going to invest more, we are not going to pay more taxes because the quality of teaching is not as high as it should be. The money is not invested, and therefore the starting salaries are low, and therefore you cannot attract the best and brightest back into the profession.

It is an ongoing cycle. How do you break out of it? How do you break out of this chicken and the egg cycle and move out into excellence? That is exactly what I am trying to do with this bill: start with a program that targets the best and brightest students and gets them back into the teaching profession.

You can say to the taxpayers: you are paying for quality; we can show you because of the high standards required to participate in this program. Here is what I am proposing: that we establish a national foundation for excellence that would be funded in part by the Federal Government, largely by the Federal Government, $200 million a year for the next 5 years, that would also allow for States and private corporations to participate if they desire to do so.

Here is the way it would work. The funds from this particular foundation would be available to our best and brightest students, those in the top 10 percent of their class, those who have scored in the top 10 percent in ACT scores and SAT scores. We are not paying for mediocrity. We are not asking the taxpayers to simply pay for more teachers. We are talking about investing in the best and brightest and getting a portion of them back into the profession.

The amount of financial aid would depend upon the students commitment to teaching in public education after they graduate. A ceiling of $20,000 would be available for individuals who will teach a minimum of 2 years; $28,000 if they would commit to teach for 3 years; $36,000 for 4 years; all the way up to a maximum of $70,000 that might be available for those who would teach a minimum of 6 years in public education after they got out of college.

What would this mean, Mr. Chairman? It would mean that a student could afford to go to any university or college in the United States under this program. If we are talking about attracting the best and brightest, we simply cannot give them the amount of money that would only enable them to go to certain educational institutions. The sky has to be the limit. They have to be able to go to Harvard or to Stanford or to Yale or to Duke or to many other institutions, the University of Chicago as well as to be able to go to the University of Oklahoma, the University of Kansas, the University of Mississippi. It would be the choice of that student.

That student would be able to go to any college or university in the country and have the ability under this program to get a grant, a grant that would cover the full cost of their education, wherever they might happen to go. Some institutions are simply more expensive than others. So, we want to have it open to all the best and brightest of the students.

This board, for example, that would be established, as I say, partly funded by the Federal Government, every State would be assured that that State would have a minimum; the goal would be at least a hundred students from that State each year able to get these scholarships. If a State Government wanted to participate—and this would be voluntary—or if a corporation within a State wanted to participate, they could contribute additional funds toward the education of that student.

Let us say that the State of Illinois or let us say that a corporation in Rhode Island or the State of Mississippi or a business in Mississippi wanted to contribute funds to this National Foundation for Excellence, then the requirement would be that, whenever that student finished their education—they might go out of the home State to go to college—whenever they finished the college or university experience, the requirement would be that they would go back to that home State and teach in that home State's public schools for a period of time after they graduated.

This would be a strong incentive to take the Federal seed money and encourage States and private corporations and others to involve themselves into adding contributions, voluntary contributions to it, because it would be a way of increasing the number of students that would go back to that State to teach in public education, these best and brightest students, after they graduate.

I have looked at some of the other proposals before you, Mr. Chairman. For example, I know that you have before you another major bill, S. 1675, under consideration by the committee. There are central differences between what I am suggesting and that bill, for example. Under that bill there are no defined standards. It simply says that the State departments of education—being a former governor, I have certainly nothing against State departments of education—they would decide to give scholarship funds to those students that they thought had promise as teachers.

With all due respect, Mr. Chairman, I think that is a very, very vague standard. States are always seeking money. I know that as a governor. They are not going to turn down any Federal dollars. If there is anyone applying from their State, they are going to find that they have promise as a teacher if they can get Federal funds to send them on to education.

We do not simply need to send more people on to train them as teachers, Mr. Chairman. We need to break out of this cycle. We need to attract more of the best and brightest. We need to have more of those that are going into teaching be in the top fourth of their class, not only 2 percent of them in the top fourth of their class and 50 percent in the bottom fourth, as I mentioned a while ago.

So, this is targeted. This is a way of getting the best and brightest. It does set a standard, but there is nothing magic about that standard in calling for the top 10 percent in grades or in SAT or ACT scores. That could be modified. You could also use the minority achievement test of the College Board, for example, to make sure that there is no ethnic bias here or no racial bias applied to the standard. But I think it is very important that we have a specific standard set.

We do not have enough dollars to go out and recruit massive numbers of people to go into teaching at this point. As I say, we have enough people from the more mediocre capabilities entering the profession. The problem is that we do not have enough of our best and brightest. Let us have a system that we make sure our money goes to get some of these top students into the teaching profession.

The other thing that this does is, it involves the private sector. It involves State Government in terms of contributing funds. It involves the private sector. There are many private companies, I think, across this country that, if they were given the opportunity to contribute to a National Foundation for Excellence in order to make sure that more of those students came back to the States where they were located, they would make those voluntary contributions. So, another essential difference between S. 429, which I have introduced, and S. 1675, which is before the committee, is that we would use the Federal seed money, the $200 million, not just to be a fund in itself, but we would use it to leverage additional contributions.

They would not be mandatory. States would still be able to participate if there were no additional contributions. But we would have a strong incentive to attract more private contributions.

Let us not close out the private sector. The business leadership of this country now understands that they have a real stake in education. Last year, Mr. Chairman, the private companies in this country spent more to retrain and reeducate their own workers, mainly teaching them how to read, than we as taxpayers spent on 12 years of public education for all the school children in the United States. The private sector understands that the cost of education, the failure of the educational system is a real important part of the cost of production for them.

I think if we have something that allows the private sector to participate, $200 million of Federal seed money and a foundation, with a broad based national board representing not only the education community, classroom teachers, but also some of the business leaders and others from the broader community on that board, and they select those students on the basis of verifiable standards of excellence to really attract the best and brightest into teaching, and we encourage them to participate financially, we can get the most for our dollars spent. We can make sure we are investing in excellence. We can make sure that we involve a broader amount of money, in terms of leveraging it, we can have broader participation. I think that that is what is needed.

The other essential difference is that under S. 1675 it could be spread across—I do not know, if you just have to have promise in teaching, that could even be in the top half of your class, it could be just somebody that makes a passing grade. It would not necessarily have to be excellent. It would water down your money. And the way the bill is written is, you can only give $16,000 for a maximum of 2 years to these students. I do not think that is going to do the job, to attract some of these best and brightest.

We have a $70,000 maximum if they want to make a 6 year commitment to teach.

In talking to these students, I tried this experiment, Mr. Chairman. As I say, these are the best and brightest. These are students that would qualify to enter any college or university in the United States, whether it is our best and brightest students in the presidential leadership class at the University of Oklahoma, or Oklahoma State, whether they are at Brown University in your State, whether they are at Old Miss, whether they are at Northwestern, or the University of Illinois, these are the kinds of students that could go anywhere to school. I asked them, after I asked the question, how many of you want to be teachers, and only two hands went up in this group, the last group I sampled of 175 honor students, I said this to them. What if we had a program in place based upon a requirement that you teach in the public schools a certain time after you graduate? Not loans, not loans hanging over your head when you get out, not partial grants with the rest made up in loan—and that is what you would have if you only gave $16,000; you would still have big loans hanging over the heads of these students; I do not think it is a sufficient incentive.

But I said: If we would pay, in essence, for your whole education, you in the very top of your class academically, you who are the outstanding students, how many of you might think again about being a teacher? About 15 more hands went up in that group of the very best and brightest.

I am convinced, Mr. Chairman, that, if we have a program—and we are working closely together with Chairman Kennedy's staff and others to try to give our suggestions in terms of the legislation already before you—I am convinced that we will make progress if we set standards, target our money to the best and brightest, that will help change the image of the profession, that will help uplift the profession, will help change taxpayers' attitude, know we are paying for excellence, have standards, have a national commission, do not leave it down to the State departments of education. I say this kindly as a former governor, that they are always going to want every Federal dollar they can get. Have a national board of people who will really feel a responsibility to lead. And do not close out the private sector. Make them voluntary participants and partners in this kind of program to contribute additional funds, and State Governments as well. And I think we will have something that will really help break this cycle and get that 2 percent figure up in terms of how many of those now studying to be teachers are in the top fourth of their classes.

Senator PELL. Thank you very much indeed.

Without objection, your statement will be inserted into the record.

[The prepared statement of Senator Boren follows:]

Senator David L. Boren

testimony before
The Senate Subcommittee on Education, Arts and Humanities
March 2, 1990

I am pleased to be able to testify before this committee of distinguished colleagues today, especially Senators Pell, Kennedy and Kassebaum who have done so much to champion the cause of education in this country. I am here to testify about my bill 429, the "National Foundation for Excellence Act" which I introduced a year ago. It seeks, as does Senator Kennedy's proposed bill, to restore excellence to our public education system by encouraging talented prospective teachers to enter the field of education with a program of incentive scholarships. While my bill shares a common goal with the bill offered by Senator Kennedy, it does differ to some degree by providing greater participation from the business sector.

I truly believe that the bill I introduced deals with the single most important challenge facing this generation of Americans: the critical need to restore excellence to our system of public education.

If we deal successfully with every other major policy area facing us and fail to rebuild our educational system, we will eventually undermine our progress in all other areas. The plain truth is that a nation with a second or third rate educational system will ultimately be in the second or third rank of nations.

Our public education system is the cornerstone of a strong and vital democratic system. The people cannot fully participate in a society if they are not sufficiently educated about themselves, their own past, and the nature of the problems which they confront.

Excellence in public education is fundamental to our commitment to equality of opportunity without regard to race, creed, or economic status. If we allow two standards of educational opportunity to develop, excellence in private schools for the affluent and mediocrity in public schools for the masses, we will soon find that we live in a country in which true equality of opportunity has ceased to exist.

We will also find that our economic strength and our ability to compete in the world marketplace will continue to erode and a nation that loses its economic strength will soon lose its political, diplomatic, and military strength as well.

No longer can we pay Americans ten or twenty dollars an hour to perform tasks requiring no advanced training when people in other parts of the world are willing to do the same tasks using the same machinery or the same assembly lines for far less. The only way for the United States to retain the highest standard of living in the world in a century in which human resource development has become the key element is to have the best educated work force in the world.

We are learning that the failure of our educational system to adequately prepare workers can greatly increase the cost of production in the private sector and make American companies less competitive. Private companies are now close to spending roughly as much retraining and providing remedial education for their workers as we as taxpayers spend educating all of the children in the nation in elementary and secondary schools.

The key to rebuilding our educational system is the attraction of qualified young people into the teaching profession and retention of the best teachers already in the classroom. Fine physical facilities will only produce mediocre educational experiences if they are staffed with mediocre teachers.

In recent decades, we have seen a precipitous decline in the quantity and quality of young men and women entering the teaching profession. As the field of career options available to our young people expands, the potential teachers of the last generation -- especially young women -- choose more lucrative and prestigious occupations. Research indicates that less than two decades ago, more than twenty percent of college freshmen polled planned to teach children as a career. Today that figure has dropped by more than half to an alarming six percent. Even more disturbingly, recent studies show that of college students who plan to enter the teaching profession, only 2 percent rank in the top quarter of their class academically, while over 50 percent come from the bottom quarter. And College Board results indicate that college-bound high school seniors who plan to major in education score well below the national norms in Schoolastic Aptitiude Testing. If we populate our classrooms with teachers for the next generation who cannot even measure up to the average level of academic performance, we are headed for disaster.

There is no single solution to the problem and no simple way to attract a fair portion of the best and brightest in our society to the teaching profession and keep them in it. Compensation is a major part of the problem and the failure to recognize the importance of teaching and grant it the community status which it deserves is another.

In my home state, through the Oklahoma Foundation for Excellence which I chair, we have started an annual ceremony carried on statewide television in which the business and political leaders of the state honor 4 outstanding public school and college educators each year with a medal of excellence and a $5000 prize. Likewise, 100 high school seniors are selected as academic all-staters and receive $1000 prizes.

Symbols are important. Through them we indicate to the next generation what it really means to be successful. For far too long our actions, as opposed to our words, have failed to convey upon teaching the status which it deserves.

How do we break the cycle of taxpayers who are unwilling to raise teachers salaries as long as they feel that we are bringing too many mediocre people into the profession? How do we reintegrate society's leaders into a system they believe has failed their children, their community? A part of the answer is to ask taxpayers to invest in what they know is an excellent product. We also need to invite business and community leaders -- the group most impacted by our educational system's decline -- into the process. Giving these leaders an active, hands-on role in education's future will mean not only an important new source of revenue, but also the energy and insight vital to restoring the strength of our public education system. And that is what my bill seeks to do. Not only does it encourage an influx of superior teachers into our faltering educational system, but it also provides the nation's business and community leaders with an immediate, tangible stake in its success. It is not a total solution to the problem. It does not deal with the need to retain good teachers already in the profession, but it does take a step in the right direction of bringing more of our most talented people -- educators and private sector leadership -- into teaching.

When I was Governor, we had a shortage of doctors in rural areas and small towns. We developed a Rural Medical Scholarship Program under which we paid the full educational cost of medical students who promised to practice in these under-served areas for a least 5 years after graduation or be forced to pay back all of the educational corts plus a large penalty payment. The program made a major reduction in the shortage of rural medical manpower.

It is time to act on a major scale to do the same thing for the teaching profession -- on a national scale. My bill seeks to do exactly that. It bears the title, "The National Foundation for Excellence Act". It establishes a national foundation ultimately funded by a public and private partnership to fund the full educational costs for our very best students who desire to enter the teaching profession in public schools for up to six years. It provides for governance by a board of distinguished citizens and is patterned somewhat after the Harry S. Truman Scholarship Foundation which awards scholarships to students interested in careers in public service.

A student, to apply for the educational package, would have to have tested in the top 10% of the Scholastic Aptitude Test or the American College Test; must have graduated in the top 10% from high school; must maintain a 3.2 grade point average in college; and, must commit to teaching in public schools after graduation.

The amount of available financial aid would depend on the students commitment to teaching post-graduation. A ceiling of $20,000 would be available for individuals who will teach for a minimum of 2 years: $28,000 for 3 years, $36,000 for 4 years, $50,000 for 5 years, and $70,000 for 6 years.

A penalty for failing to teach in public schools after graduation would be the principal amount of the scholarship plus interest equal to the T-bill rate plus 20 percent.

The foundation would be funded by a permanent endowment. The funding would come from a one time $200 million appropriation and an additional $200 million available for matching to private gifts, for a period of 5 years. Further, $5 million would be appropriated for each of the first 5 years for administrative and operating costs of the board.

I would envision that this foundation have a highly visible and energetic Board Chairman and membership, whose job would be to actively solicit private and corporate contributions to utilize the matching funds provisions of the legislation. This is an important element not only for the practical need of private funds, but for the public relations value in having such an effort lead on a federal level with support of the White House and Congress. Incidentally, such a foundation could serve as a host committee for an annual meeting to recognize outstanding teachers nationally. This was a campaign proposal of our President and an idea of great merit recently discussed in other forums.

The goal is to have at least 100 students per state participating in the program and states could enter into agreements with the Foundation to help pay part of the scholarship in return for the student's agreement to teach in that state.

The Board would consist of 15 members including an executive Director as an ex-officio, non-voting member.

Eleven members would be appointed by the President with the advice and consent of the President - 6 of which must have 10 years experience in education. Two of those six must be classroom teachers. The remaining five would be leaders from the private sector and the entire community.

Further, 2 would be appointed by the House (one each by the Speaker and the Minority Leader and 2 appointed by the Senate (one each by the Majority Leader and Minority Leader). One of the eleven would be designated by the President as the Chairman of the Board.

If we fail to rebuild public education by attracting well qualified people into the profession, as well as into the system, our generation will justly be held accountable for placing the future of our nation in peril. My bill was not offered as a complete answer to the problem. It is I believe, a crucial and constructive step toward a strong system of public education.

I am most certain -- and most grateful -- that my distinguished colleagues share my concern for the future of education in this nation. I am equally certain that only rigorous, decisive measures can achieve excellence in education. We are not looking for teachers who were fair students, or teachers who were good students. We want teachers who were excellent students: the best and the brightest our nation has to offer. We have the human resourses waiting to be tapped in our schools, in our educational and business communities; to neglect their potential would be to fail them, ourselves and our children. My staff and Senator Kennedy's have already have begun meeting to form a synthesis of our best ideas and I am confident that the resulting bill will be an important move toward excellence in education.

Senator PELL. You mention in your testimony the Oklahoma project. Have you got private funds going into that?

Senator BOREN. We do. We have had two experiments in Oklahoma that might indicate what could be done here. One, we had a program when I was governor in which we dealt with doctors in this situation. We had a great shortage of medical doctors in rural communities. We established a State fund in which we said to medical students: We will pay your way through medical school, free. At that time, back in the good old days, that was about $100,000; I do not know how much that is now. It is more, I am sure. We will pay your way free. The only commitment you have to make is that you will practice medicine in an underserved rural community for at least 5 years when you get out. If you do not, you have to pay it all back with a penalty.

Here the penalty for not teaching in the public schools for these students when they get out is the T bill rate plus 20 percent, a very, very hefty interest rate penalty on the amount of money that they have gotten.

We found that we doubled the number of qualified personnel, medical personnel going into the rural areas under this program. It really worked. And a percentage of those who went became a part of those communities and felt a great sense of reward, a large portion of them, and they stayed. I think we will find that.

If we can do something to get the best and brightest and not water down the standards, really go after a portion of these best and brightest, get them back into the teaching profession—and we have to work creatively on the next step, how do we retain these best and brightest—I am convinced that a lot of them will stay.

I think really going after these students is important. We are doing something in Oklahoma right now again that I think shows what the private sector will do. In fact, the President will be there on May 4 in Oklahoma to help us promote this idea. Every year we pick our 100 high school seniors that are most outstanding and we honor them as academic all-staters. Some of these we are now trying to raise funds to offer scholarships to them if they will go on and be teachers, along the lines that we have suggested in this bill.

We also honor our most outstanding teachers, the four: elementary, secondary, college and an administrator each year. We give them $5,000 awards; the students, $1,000 awards. We do this on statewide television.

And then we have gone in and encouraged, Mr. Chairman, people all over the State to get involved at the local level in raising private funds, setting up private foundations, solely for academic programs in their public schools. We now have in the State of Oklahoma, in hard economic times, 114 towns that have formed private foundations to help the academic programs of their local public schools. I do not want to take too much time, but let me give you one example of this.

Three weeks ago I was in Woodward, OK, it is an oil and gas town that has been decimated. They have lost 20 percent of their population since 1980. They raised $130,000 in 10 days to launch their local private foundation for their public school. The teachers in that public school—they will give the interest each year; they will keep adding to it—the teachers in that public school apply for grants. They add new courses in their curriculum, maybe it is a new microscope, maybe it is new study materials, maybe it is bringing in guest lecturers. Maybe it is the principal that will apply to add another foreign language if they do not have the tax dollars to offer in that school system. The private foundation board will then grant grants back to these teachers or administrators who apply to them. This is catching on all over the State of Oklahoma.

We are now No. 1 in the Nation in this effort. But it shows, Mr. Chairman, what the private sector, what private citizens are willing to do.

When these people get involved in towns of 8,000 and 10,000, the community leaders get involved in making voluntary contributions—not taxes, voluntary contributions—to help their public schools raise their academic standards, they really get interested. They get interested in performance standards. They get interested in quality programs. They became a whole nucleus of people in that community who understand the importance of education.

That is why, Mr. Chairman, I am saying, based upon our experience with the medical programs, based upon our experience in terms of getting private sector involvement, private citizen involvement now, financial involvement, that I really hope that you will craft a program like this that sets up a national foundation model that with Federal seed money, voluntary private and State Government contributions, will stretch your money, target it to quality, target it to excellence. And I think we can break out of this cycle in our country in which a growing number of our best and brightest students simply rule out going into education completely.

Senator PELL. Thank you very much indeed.

Senator Cochran.

Senator COCHRAN. Mr. Chairman, let me just thank Senator Boren for his being here today and sharing with us his ideas. I think his suggestion is very intriguing and that we ought to seriously consider it as we look at ways to improve teaching quality, learning experiences for our Nation's students and teachers.

Thank you very much for being here and talking to us, Senator.

Senator BOREN. Thank you, Senator Cochran.

Senator PELL. Senator Simon.

Senator SIMON. Thank you.

I also think we are going to have to mesh some things around here, frankly. I, with the cooperation of my colleagues, have been able to get a modest move in that direction. We have what we call Paul Douglas scholarships that are available. We gave out 5,000 this year to the top 10 percent. They have to teach. It is $5,000 a year. They have to teach 2 years.

I do not see any overlapping, frankly.

Senator BOREN. No. It is very complementary, I think.

Senator SIMON. I think so.

I will be introducing a bill Tuesday that also addresses another problem. Ten years from now one-third of the students in our schools, elementary and secondary, will be minority students.

Senator BOREN. Right.

Senator SIMON. But if the present trends continue, only 5 percent of the teachers will be minority teachers. Then what you do is, you deal with this whole question of the quality of teaching, which I think is just absolutely essential.

If I can just give an illustration that both you and the chairman can understand, we get all these invitations to speak. Most of them we have to turn down because we have other commitments. But every once in a while some friend will approach you and say: Six months from now, 9 month from now, can you speak somewhere? And because he is a good friend, why, you agree. Well, I had a friend who was the chairman of the board of the Scholl College of Podiatry. He said: "Will you speak at the commencement 6 months from now? So I agreed to speak at the commencement. All of a sudden, it is one week away and I have got to speak at the Scholl College of Podiatry. I had never been to a foot doctor in my life. I do not know anything about it. I started reading up about Abraham Lincoln's foot doctor and everything else. I found out something, and I am sure this is true in Oklahoma and Rhode Island, too. I discovered that in the State of Illinois our standards are much higher for those who handle our feet than for those who handle our children.

You know, it really says something about our priorities.

One other problem that none of these bills really deals with—and I do not know how we deal with this. I talked to a group of school administrators. One of the questions I ask every time is: How many of you, if you could make the same money, would be teaching rather than serving as administrators? Half the hands go up.

The only way a teacher can move ahead economically is to get out of the field of teaching.

Senator **Boren**. Right.

Senator **Simon**. Something is wrong there. I do not know how we deal with that.

You are a man who has reflected on these things. Do you have any idea?

Senator **Boren**. I think one of the things we have to do, one of the things I have urged in our State that has not been done, is that this also encourages a continually growing sector in terms of administrative overhead. You do not have a way of rewarding a good teacher with salary, so what do you do? You create another vice principal's position, another assistant superintendent's position. And before we know it, a larger and larger portion of the budget in education is going into administrative overhead and not into direct classroom instruction.

So, I think one of the things that we can do is to slow this trend. I have urged in our State that we do a survey of administrative overhead costs. When we start allocating the State funds to districts, we reward districts with lower administrative costs and a higher percentage of their budgets going into classroom instruction. That is one of the things that will encourage more of the money to go into teachers' salaries.

Also what it will do, it will encourage less differential in salaries between those people really in the classroom and those people performing administrative tasks. It is absolutely wrong for your finest teacher in the classroom to be receiving maybe a fourth of the salary in a year's time that one of your middle-range administrative people in the system is receiving. So, I think we have to put some incentives in.

I would urge this. I go back to these students that we are thinking about in terms of the portion of the best and brightest into the profession. And I go back; we have enough interest among the students in the bottom half of the class going into teaching. What we have to do is get interest in the students in the top 10 or 20 percent, or the top fourth, going into teaching.

How do we do that? Those students—and this is what worries me, as you look at the bills before you, this is the reason I am worried about, say, only giving a $16,000 max grant over 2 years. These students can do anything. They are going to be confronted the day they graduate. They can probably go out and go into private industry and earn $10,000 a year more, at least in starting salaries--these are the best and brightest students—than they can going into teaching.

In order to really balance that off, you have to make the grant large enough. They can go to any college or university, in essence, free. That becomes a very strong incentive. Even these best and brightest students who can go out and have high starting salaries, they do not like to go out with all the debt hanging over them. So, I think that if you are really going to make the system work, it is going to have to be bold. It cannot be a partial step of a few thousand dollars that is still going to leave them mainly with loans hanging over their head. It is going to have to be bold enough to in essence pick the best. Say that we are going to send you free, in essence, to any college or university in the country where you want to attend and can get in. And then we are going to give you a real requirement of teaching and giving back when you get out. That is how you are going to make your contribution back.

I think we have to be bold. I think if we just do it halfway, that is not going to be enough for those extra 15 hands, in my example, to go up among the best and brightest students. We have to do it in a way that really does reach those students who have all of these other career options. So I would urge you as you look at it, do not close out the private sector, but also be bold enough in terms of targeting the money, large sums of money even, in order to give, in essence, free higher education to those really best and brightest students.

I think that is the only thing that will tip the scales in terms of getting a significant number of them over into teaching as a career.

Senator **Simon**. Thank you.

Senator **Pell**. Thank you very much for being with us, Senator Boren.

Senator **Boren**. Thank you, Mr. Chairman.

Senator **Pell**. Your testimony was very interesting.

Dr. Haynes, thank you very much for your patience and willingness to stand aside for this period of time. We are very glad to welcome you as Assistant Secretary for Postsecondary Education. I am sorry that Secretary Cavazos could not be here because of other obligations. We are delighted that he sent you, who has much of the responsibility in this area, in his place.

We welcome your testimony.

Finally, a very special welcome to the Commissioner of Education in Rhode Island, Troy Earhart. Dr. Earhart and I have worked together on many issues and I look forward to his remarks today.

I hope you will introduce your colleagues.

STATMENTS OF DR. LEONARD L. HAYNES, III, ASSISTANT SECRETARY FOR POSTSECONDARY EDUCATION, U.S. DEPARTMENT OF EDUCATION; ACCOMPANIED BY DR. JACK MACDONALD, ASSISTANT SECRETARY FOR ELEMENTARY AND SECONDARY EDUCATION, AND DR. ELIZABETH A. ASHBURN, SENIOR RESEARCH ASSOCIATE IN THE OFFICE OF EDUCATIONAL RESEARCH AND IMPROVEMENT

Mr. HAYNES. Thank you very much, Mr. Chairman and members of the committee.

I would like to introduce my colleagues who are joining me here this morning. First we have the Assistant Secretary for Elementary and Secondary Education, Dr. Jack MacDonald.

Senator PELL. Could you hold the mike a little closer to you?

Senator SIMON. I think we have got one of these wavering mikes like you had. You want to switch mikes there.

Mr. HAYNES. Also, to my far left is Dr. Elizabeth Ashburn, who is the Senior Research Associate in the Office of Educational Research and Improvement.

Mr. Chairman and members of the committee, I appreciate this opportunity to testify——

Senator PELL. I think the mike really is not working.

Senator SIMON. It is on and off.

Senator PELL. I know that my mikes did not work here.

Mr. HAYNES. How is that, Mr. Chairman?

Senator PELL. That is fine.

Mr. HAYNES. Mr. Chairman and members of the subcommittee, I appreciate this opportunity to testify on S. 1675, the Excellence in Teaching Act, and S. 1676, the National Teacher Act of 1989.

With your permission, Mr. Chairman, I would like to summarize my remarks and submit a longer statement for the record.

Senator PELL. That will be excellent. We will put it in full in the record.

Mr. HAYNES. Thank you very much, sir.

To begin, I must convey to the subcommittee the department's opposition to both of these bills because they either address problems we do not agree exist or they fail to recognize the extensive and pervasive Federal efforts already in place to address the problems that do exist.

Earlier this week, President Bush and the governors announced six national education goals that will improve the opportunities for all of our youth. Reaching these goals will not be easy. As the President and the governors emphasized in their statement, fundamental changes must occur, including reorienting our schools to focus on results, giving teachers and principals more discretion in decision making, and providing a way for gifted professionals who want to teach to do so through alternative certification avenues. With talented and qualified teachers dedicated to excellence, there is no doubt in my mind that we will succeed in achieving these national goals.

President Bush and Secretary Cavazos are strongly committed to improving the quality of teaching in America's schools. The President has requested $400 million is his fiscal year 1991 budget, an increase of 38 percent over fiscal year 1990, for Federal programs that support teacher training.

Secretary Cavazos announced last week that he will be appointing a special advisor for teacher education whose responsibilities will be to serve as the Secretary's liaison to the education community on teaching issues and to coordinate teacher education activities throughout the department.

Let me also stress that Secretary Cavazos is reviewing Title V of the Higher Education Act, "Educator Recruitment, Retention, and Development," so that he can offer substantive suggestions to the Congress on this and other key issues during the upcoming 1991 reauthorization of that act. We believe that reauthorization is the appropriate opportunity to consider changes in Federal support for teacher education.

The Department of Education opposes enactment of S. 1675 and S. 1676. Our opposition to these bills is based upon the following concerns.

No. 1, the bills seek to address a problem that we do not believe exists, i.e., a general shortage of teachers.

No. 2, they duplicate many existing Federal programs.

No. 3, they fail to take account of a number of efforts currently being pursued across the country by States, local school districts, universities, the business community and others.

No. 4, they authorize a host of already-tried, retread programs that offer no coherent vision to address the key issues of the professional teacher development.

A number of the programs that would be authorized by these bills are premised on the fear that our Nation is facing a shortage of elementary and secondary school teachers. While certain shortages may occur in certain States or local areas in certain fields and an underrepresentation of minorities, there is no evidence of an overall teacher shortage now, nor does it appear that there will likely be one in the foreseeable future.

In fact, the Bureau of Labor Statistics predicts that the number of teachers needed will vary during the 1990s, depending on grade levels, but that no overall teacher shortage will exist.

Alternative teacher certification programs have achieved enormous success in attracting highly qualified teachers in a number of States. New Jersey turned a statewide shortage of teachers into a surplus in just 5 years through alternative certification. Since the inception of the New Jersey program, 21 percent of the participants have been minorities, a significantly higher level of minority participation than among the general teaching pool.

Mr. Chairman, one of the key strategies laid out in each of these proposed bills is to attract additional teachers by awarding grants and providing loan forgiveness in return for a teaching commitment for a limited number of years. The Department opposes this because it would expose the Federal Government to major cost risks without a reasonable assurance that they will draw into teaching those who would not have entered the profession anyway. Indeed, States have reported that such strategies are generally ineffective in increasing the pool of teachers.

Thus, we oppose these approaches even if we believed a general shortage were looming.

The other major premise of these bills is the need for the professional development of teachers. Currently many schools operate on an industrial model of schooling: everybody memorizes the correct answers for responses to multiple choice tests. Many teachers have learned this way throughout their own K-12 and postsecondary experience, and they often teach in the same manner. This approach must be fundamentally revamped. These bills, however, show no indication that anything more than business as usual is necessary.

We believe the emphasis of these bills on general teacher recruitment tends to obscure and shift the focus from more immediate and central issues: improving the quality of teaching, increasing the number of effective minority teachers employed in our schools, and increasing the number and improving the skills of teachers in specific areas, such as math, science, special education, bilingual education, and teachers for urban areas especially for those in the inner city.

I mentioned earlier that the President has requested $400 million in fiscal year 1991 for 11 Department of Education programs that support teacher training. Other agencies such as the National Science Foundation also administer programs affecting teachers. These bills that we are considering today would authorize a number of new programs that would duplicate or overlap what can already been carried out under existing law.

The department currently administers programs designed to improve teaching in mathematics and science, special education and bilingual education, and to increase the supply of teachers, including minority teachers, in those fields. I have attached an addendum to my testimony outlining the programs, Mr. Chairman.

State and local governments, institutions of higher education, and the private sector have also been working on ways to improve the quality of teaching and to attract more highly qualified minority teachers and teachers in special fields.

At present, 46 States require tests of minimum competency for new teachers, but only three have applied them to incumbent teachers, and the tests are not sufficiently rigorous. However, States and universities are also taking steps to upgrade the curriculum in our colleges of education and improve teacher testing.

We are also seeing a number of impressive efforts that will make the teaching profession more attractive, especially the movement toward site-based management. There are also under way a number of Federal, State and local programs to provide the inservice education and induction assistance needed to enhance teacher performance and teacher professionalism.

A diversity of site-based efforts now under way hold much greater promise of real improvement than an elaborate nationwide system of academies that do not operate at the school level, where change must occur.

Before concluding, I would like to share with you some of the key recommendations for improving the quality of teachers that Secretary Cavazos outlined in a speech before the AACTE last week. With your permission, Mr. Chairman, I would like to insert the full text of the Secretary's speech into the record.

The Secretary made the following key points:

One, institutions of higher education should participate fully in the restructuring of our elementary and secondary schools.

Two, States must work with colleges of education to create greater flexibility for teacher training programs to permit the innovation demanded by restructuring strategies. Toward this end, the department will soon host a conference entitled Flexibility for Programs to Educate Teachers, to discuss the need for innovation and alternative certification programs.

And, finally, it is time for universities to make teacher education a priority, to recognize that the preparation of teachers is not just the responsibility of schools of education but an integral part of the university mission. The Department of Education will sponsor a conference on Higher Education's Investment in the Education of Teachers—this is tentatively set for September—to develop strategies for improving higher education's contribution to the training of first-rate teachers for our elementary and secondary schools.

These recommendations are based on our vision of teaching and learning in our schools. Our schools should be places where students come to know how to think carefully about issues and ideas. They should understand history and literature and science and math, rather than just memorize names and dates and rules. They should love to learn. And our teachers should be thinkers and question askers and problem solvers and creators and lovers of learning. And they should believe that all children can learn.

While we share your goals, we cannot support either of these bills. We believe the department's current authority and proposed activities to support and strengthen the teaching profession, as well as State-sponsored activities like choice and site-based management, provide a more comprehensive and better coordinated approach to addressing the needs of the teaching profession.

Mr. Chairman, my colleagues and I welcome your questions and comments. Thank you for this opportunity to testify.

Senator Pell. Thank you very much for being with us, Dr. Haynes.

Without objection, your prepared statement will be inserted into the record.

[The prepared statement of Mr. Haynes follows:]

Prepared Statement of Leonard L. Haynes, III

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

I appreciate this opportunity to testify on S. 1675, the Excellence in Teaching Act, and S. 1676, the National Teacher Act of 1989. However, I must convey to the Subcommittee the Department's opposition to both of these bills because they either address problems we do not agree exist, or they fail to recognize the extensive and pervasive Federal efforts already in place to address the problems that do exist.

Earlier this week, President Bush and the Governors announced six national education goals that will improve the opportunities for all our youth -- from pre-school to graduate school. Reaching these goals will not be easy, and as the President and the Governors emphasized in their statement, fundamental changes must occur, including reorienting our schools to focus on results, giving teachers and principals more discretion in decision making, and providing a way for gifted professionals who want to teach to do so through alternative certification. With talented and qualified teachers dedicated to excellence, there is no doubt in my mind that we will succeed in achieving these national goals.

President Bush and Secretary Cavazos are strongly committed to improving the quality of teaching in America's schools. The President has requested $400 million in his FY 1991 budget, an increase of 38 percent over FY 1990, for the 11 Federal programs that support teacher training. The request includes funding for his proposed legislative initiatives, that are part of S. 695, the "Educational Excellence Act," which will assist States in developing alternative teacher and principal certification programs and recognize excellence in teaching by providing cash awards to outstanding teachers. The President is also requesting $25 million for a new initiative to improve the training of school principals.

In Chicago last week Secretary Cavazos announced, in a speech to the American Association of Colleges for Teacher Education, that he will be appointing a Special Advisor for Teacher Education, whose responsibilities will be to serve as the Secretary's liaison to the education community on teaching issues and to coordinate teacher education activities throughout the Department of Education. These activities are administered not only by my own Office of Postsecondary Education, but also by the Offices of my colleagues in Elementary and Secondary Education, Special Education, Bilingual Education, Vocational and Adult Education, and Educational Research and Improvement. Let me also stress that Secretary Cavazos is reviewing Title V of the Higher Education Act, "Educator Recruitment, Retention, and Development," so that the Department can offer substantive guidance to the Congress on this and other key issues during the upcoming 1991 reauthorization of that Act. We believe that reauthorization is the appropriate opportunity to consider changes in Federal support for teacher education.

The Department of Education opposes enactment of S. 1675 and S. 1676. As a whole, we do not believe that they would significantly improve the current Federal effort to strengthen the teaching profession, nor would they improve the effectiveness of teaching in our schools. Our opposition to these bills is based upon the following concerns: (1) The bills seek to address a problem that we do not believe exists, i.e., a general shortage of teachers; (2) they duplicate many existing Federal programs; (3) they fail to take account of a number of efforts currently being pursued across the country by States, local school districts, universities, the business community and others; and, (4) they authorize a host of already tried, retread programs that offer no coherent vision of how we might address the very important issue of the professional development of teachers.

A number of the programs that would be authorized by these bills are premised on the fear that our nation is facing a shortage of elementary and secondary school teachers. We believe that this premise, and consequently the bills' emphasis on general teacher recruitment, is unfounded. While shortages may occur in certain States or local areas or in certain fields, there is no evidence of an overall teacher shortage now, nor does it appear that there will likely be in the foreseeable future.

In fact, a 1988 survey by the Association for School, College and University Staffing, Inc., found that, in most teaching fields, supply and demand are in balance. While shortages exist in special education, bilingual education and math and science education, these problems are already addressed by existing Federal programs. In addition, the Bureau of Labor Statistics predicts that the number of teachers needed will vary during the 1990's, depending on grade levels, but that no overall teacher shortage will exist.

Further analysis by the National Center for Education Information (NCEI) indicates that the teacher pool is broader than some would lead you to believe. NCEI surveyed school districts about their applicants for teaching positions for the fall of 1988 and found that nearly half of the applicants came from pools other than recent college graduates fully certified to teach. They included former teachers seeking full-time teaching positions, midcareer changers seeking to become teachers, and retirees seeking teaching jobs. A survey of State offices responsible for issuing teaching certificates revealed that persons from among these non-traditional groups were increasingly applying for certificates to teach.

In recent years, declining elementary and secondary enrollments have been accompanied by increases in the number of teachers, especially at the elementary school level. Moreover, there is a growing pool of college students interested in entering the teaching profession. In 1987, 8.1 percent of college freshman expressed an interest in a teaching career, up from a 20-year low of 4.7 percent in 1982.

In fact, Dr. Sibyl Jacobson, Vice-President of Metropolitan Life Insurance Company and President of the Metropolitan Life Foundation, a witness at your hearing on the teaching profession last week, cited a Harris poll of teachers, which in 1989 indicated that 67 percent of America's public school teachers say they would advise a young person to pursue a career in teaching, compared with only 45 percent who would have done so in 1984.

We are also especially optimistic about the ability of recent State and local programs to attract highly qualified teaching candidates into the field through non-traditional channels. As you may know, alternative teacher certification programs have been a major success in a number of States. New Jersey turned a statewide shortage of teachers into a surplus in just five years through alternative certification. The average score of these new candidates on the National Teachers Examination is significantly higher than for those receiving certification via the usual route. In 1988, the New Jersey Provisional Teacher Program accounted for 29 percent of the new teachers entering the State's public schools.

Similarly, that program has done an outstanding job of attracting significantly more math, science, and minority teachers. Since the inception of the New Jersey program, 21 percent of the participants have been minorities, a significantly higher level of minority participation than among the general teaching pool.

Also, evidence of the high motivation of these teachers is found in the low proportion of those provisional teachers leaving their jobs in the first year -- only 4 percent in 1987-88, compared with 16 percent of the regularly certified first-year teachers in the State. Improving retention rates will also increase the supply of teachers.

Mr. Chairman, one of the key strategies laid out in these proposed bills is to attract additional teachers by awarding grants and providing loan forgiveness in return for a teaching commitment for a limited number of years. The Department opposes this because it would expose the Federal Government to major cost risks without a reasonable assurance that they will draw into teaching those who would not have entered the profession anyway. Indeed, States have reported that such strategies are genarally ineffective in increasing the pool of teachers. Thus, we would oppose these approaches even if we believed a general shortage were looming.

The other major premise of these bills is the need for the professional development of teachers. There is an extraordinary need for improvement in this area. This critical need emerges from our expectation that both new and experienced teachers should foster learning for students from diverse cultures and to educate these students to think. These are new expectations for our teachers and schools, demanded by the nation's business community and by general economic concerns for the country.

Currently, many schools operate on an industrial model of schooling: everybody memorizes the "correct answers" for responses to multiple-choice tests. Many teachers have learned this way throughout their own K-12 and postsecondary experience, and they are typically prepared to teach in this same manner. This approach to education must be fundamentally re-vamped. These bills, however, show no indication that anything more than "business as usual" is necessary.

Critical problems exist for the teaching profession and for effective teaching in our schools. But these problems have not been well-conceived by the programs in these bills. We have evidence from the past that adding programs here and there does not solve the complex problems we face today.

We believe the emphasis of S. 1675 and S. 1676 on general teacher recruitment tends to obscure and shift the focus from more immediate and central issues -- improving the quality of teaching, increasing the number of effective minority teachers employed in our schools, and increasing the number and improving the skills of teachers in specific areas, such as math, science, special education, and bilingual education, and teachers in the inner cities. These issues are already being addressed, both through a number of currently funded Federal programs and, often innovatively and creatively, through the efforts of States, school districts, and the private sector.

I mentioned earlier that the President has requested $400 million in FY 1991 for 11 Department of Education programs that support teacher training, and I have added an addendum to my testimony which outlines these programs. Other agencies, such as the National Science Foundation, also administer programs affecting teachers. S. 1675 and S. 1676 would authorize a number of new programs that would duplicate or overlap what can already be carried out under existing law.

The Department currently administers programs designed to improve teaching in mathematics and science, special education, and bilingual education, and to increase the supply of teachers, including minority teachers, in those fields. We administer student financial assistance programs, which can be used by potential teachers, and various scholarship and fellowship programs. We also administer programs designed to improve teaching in general. Let me mention a few specific examples of the Federal programs already underway:

o The Fund for the Improvement and Reform of Schools and Teaching (FIRST) was created by Congress less than two years ago to improve educational opportunities for elementary and secondary school teachers and students and has broad authority to support activities to improve teaching and increase the number and quality of minority teachers. FIRST, as well as the Fund for Innovation in Education, also established two years ago, could also be used to demonstrate school-based management strategies and the effects of reducing class sizes.

- Our largest teacher training program, the Dwight D. Eisenhower Mathematics and Science Education Program, for which the President has requested $230 million in FY 1991, a 70 percent increase over FY 1990, makes financial assistance available to State and local educational agencies and other entities to improve the skills of teachers and the quality of instruction in mathematics and science. School districts are also encouraged to use these funds to recruit or retrain minorities as science and math teachers.

- The new Mid-career Teacher Training program will help universities design and implement flexible programs to help those with baccalaureate degrees and job experience in professions other than classroom teaching to make career changes into teaching.

- The Christa McAuliffe Fellowships finance sabbaticals for outstanding teachers to pursue projects to improve teaching.

- Other programs include special education personnel development ($71 million proposed for FY 1991), bilingual education training grants ($31.9 million), and the Paul Douglas Teacher Scholarships ($14.9 million).

States also have the authority to use Chapter 2 block grants, vocational education State grants, adult education State grants, and drug-free schools State grants for teacher training programs. The Department makes assistance available for teacher training through the regional education laboratories, and we support an extensive network of national research and development centers, the clearinghouses of the ERIC system, and various data collection activities, all designed to cast light on important teaching issues.

My point in reciting all of these programs, Mr. Chairman is that under current Federal law, we can now undertake almost any kind of new initiative or test any kind of theory about what will "attract and train potential candidates for the teaching profession." The point is, however, that we need to know more about the direction that must be taken. We need to target our efforts in that direction.

States and local governments, institutions of higher education, and the private sector have also been working to improve the quality of teaching and to attract highly qualified minority teachers and teachers in special fields.

In California, minority participation in the Los Angeles Unified School Districts' Intern Program has grown to 35 percent. Several schools of education also demonstrated a willingness to sponsor alternative teacher preparation programs of their own. Glassboro State, Memphis State, and Arkansas-Little Rock, among others, have created high quality programs for "career-switchers" and mothers re-entering the work force.

At present, 46 States require tests of minimum competency for new teachers, but only three have applied them to incumbent teachers, and the tests are not sufficiently rigorous. However, States and universities are also taking steps to upgrade the curriculum in our colleges of education and improve testing of teachers.

Grambling State University turned around its teacher education program by raising admission standards and by requiring education majors to have a concentration in another academic field. The school also developed workshops to help students improve math and writing skills, and revised its curriculum to ensure coverage of all areas tested by the certification exam. While the size of each graduating class dropped from 150 to 50, three times as many students are ready to enter the teaching force upon graduation, because virtually all of them now pass the Louisiana teacher certification exam, compared with only a 10 percent success rate for Grambling students on the exam in the late 1970's.

To make the teacher job market more flexible and to reach the best people, seven States in the Northeast have just agreed to implement a regional certificate, which would facilitate an applicants' move from one State to another without his or her having to take a battery of exams to be recertified. New York and the six New England States, can now serve largely as one job market. The Chief State School Officers of these seven states, in collaboration with the Department-funded regional education laboratory and the private sector, have been working on a publication, The Northeast Common Market Study, which is designed to depict both the State and the regional supply of teachers by area of instructional specialization for each New England State and New York.

An additional component of the study will indicate the qualifications of those who are in the pre-service pipeline to replace teachers who are leaving their positions for retirement or other reasons. The Department would like to see more certification reciprocity among States, and the President's proposed alternative certification program includes authority for States to use funds for this purpose.

We are also seeing a number of impressive efforts that will make the teaching profession more attractive, especially the movement toward school-based management. Greatly enhanced responsibility of teachers, inside and outside the classroom, coupled with higher salary scales, will help attract the kind of top professionals necessary to lead our education recovery. There are also underway a number of Federal, State, and Local programs to provide the inservice education and induction assistance needed to enhance teacher performance and teacher professionalism. In addition to activities supported with existing Federal program funds, there are a variety of State activities underway and joint efforts between school districts and higher education.

For example, there are Theodore Sizer's Coalition of Essential Schools, the work of Dr. James Comer with elementary schools, the Chelsea Schools partnerships with Boston University, and now the professional development schools being encouraged by the Holmes Group, at AFT, and the State of Massachusetts, among others. We know that genuine continuing education of teachers must be part of the regular life of a school. A diversity of school-based efforts such as those now underway hold much greater promise of real improvement than an elaborate nationwide system of academies that do not operate at the school-level where change must occur.

Before concluding, I would like to share with you five recommendations for improving the quality of teachers that Secretary Cavazos outlined before the AACTE last week. With your permission, Mr. Chairman, I would like to insert the full text of the Secretary's speech into the record.

- First, institutions of higher education should participate fully in the restructuring of our elementary and secondary schools. With truly collaborative efforts they can provide invaluable assistance to schools and districts engaged in restructuring, which will certainly strengthen the professionalism of teachers. At the same time, they can become better informed about the professional development needs of teachers.

- Second, States must work with colleges of education to create greater flexibility for teacher training programs. What we need are consistent requirements flexible enough to permit the innovation demanded by restructuring strategies. Toward this end, the Department of Education will soon host a conference on Flexibility for Programs to Educate Teachers, to which we will invite Governors, Chief State School Officers, and key players in teacher education to discuss the need for innovation and for alternative certification programs.

- Third, faculty members in education and in liberal arts must provide a rigorous curriculum that will result in outstanding graduates. Recent findings by the National Center for Research on Teacher Education show that teachers need to know not only the "what" and "how" of their subjects, but also how to deal with the "why" questions that students ask.

- Fourth, research-based knowledge must be incorporated efficiently into teacher education programs, with an emphasis on higher-order thinking skills and on meeting the needs of at-risk youth. The Department will continue to support this effort through its funding of national research centers.

- Finally, it is time for universities to make teacher education a priority, to recognize that the preparation of teachers is not just the responsibility of schools of education, but an integral part of the university mission. The Department of Education will sponsor a conference on Higher Education's Investment in the Education of Teachers, tentatively set for September, to develop strategies for improving higher education's contribution to the training of first-rate teachers for our elementary and secondary schools.

These recommendations are based on our vision of teaching and learning in our schools. Our schools should be places where students come to know how to think carefully about issues and ideas. They should understand history and literature and science and math -- rather than just memorize names and dates and rules. They should love to learn. And our teachers should be thinkers and question-askers and problem-solvers and creators and lovers of learning, and they should believe that all children can learn. I do not think that these bills will achieve this vision.

I thank the Subcommittee for giving me the opportunity to make this presentation. We share the same worthy goal -- assuring maximum opportunity for our children, America's most precious resource. However, while we share your goals, we cannot support either of these bills. We believe the Department's current authorized and proposed activities to support and strengthen the teaching profession, as well as State-sponsored activities like choice and school-based management, provide a more comprehensive and better coordinated approach to addressing the needs of the teaching profession. My colleagues and I welcome your questions and comments. Thank you.

Addendum

The great majority of activities provided for in S. 1675 and S. 1676 are already authorized (and, in many cases, are already being carried out) under existing Department of Education programs. A program-by-program listing follows.

	Excellence in Teaching Act S. 1675	Existing Programs
Title I	Teacher Corps	Student Financial Assistance Programs
	Senior Teacher Corps	Christa McAuliffe Fellowships
Title II	Professional Development Academies	LEAD; Eisenhower Mathematics and Science Education; Professional Development Resource Centers (unfunded)
Title III	Minority Teacher Recruitment	Eisenhower Mathematics and Science Education; Douglas Teacher Scholarships; Harris Graduate Fellowships; Graduate Assistance in Areas of National Need; Bilingual Education Training Grants; FIRST; Special Education Personnel Development
Title IV	Bilingual Teacher Enhancement	Bilingual Education: Educational Personnel Development; Training Development and Improvement
Title V	Early Childhood Development Enhancement	HHS-administered early childhood education training programs
Title VI	Teachers of Children with Handicaps Enhancement	EHA Special Purpose Funds
Title VII	Mathematics and Science Teacher Enhancement	Eisenhower Mathematics and Science Education
Title VIII	School-Based Management/Shared Decision-Making Incentive	FIE; FIRST
Title IX	Teacher Recognition	Presidential Awards for Excellence in Education (proposed)

	The National Teacher Act S. 1676	Existing Programs
Title I	Loan Forgiveness for Teachers	No comparable program in existence.
Title II	Class Size Research and Demonstration Project	FIRST; FIE; School College and University Partnerships
Title III	Model Programs in Teacher Preparation and Promising Practices	FIE; FIRST; FIPSE; School, College, and University Partnerships
Title IV	New Careers for Teachers	Eisenhower Math and Science Education; Mid-career Teacher Training; Alternative Certification (proposed)
Title V and Title VI	National Teacher Academies and Congressional District Teacher Academies	FIE; FIRST

Senator **Pell**. I am disappointed and sorry to see the administration taking such a strong position against this legislation, which has general support from the congressional end. I had hoped that we might be able to work with the education President to develop a set of initiatives that would help to meet the needs of our Nation's teachers. But I must report, just based on my knowledge of the relationship now and what it has been in the past year, there does not seem to be the willingness on the part of the administration to sit down and work with our people on the staff level. I am not talking about you, Dr. Haynes, or any of us Senators. But we all know that the way legislation gets accomplished in motion as it goes forward is by the work of our respective staffs working together in harmony.

It is not enough just to set up a series of targets and talk about an education President, but it is important that we work together in specifics and remedy the situation that exists.

For example, your National Center for Education Statistics, part of your department, estimates we will need over two million teachers between 1988 and 1995. Yet, the supply of potential new entrants is about 135,000 each year. Is it your view that the estimates of your own department are inaccurate? What is the answer for this discrepancy?

Mr. **Haynes**. Mr. MacDonald.

Mr. **MacDonald**. Mr. Chairman and members of the committee, I think what we have seen occur in the whole issue of what is available is a primary change in where our teachers are coming from. For example, in 1986, 80 percent of the new teachers that were employed in the State of Connecticut came not from preparing institutions but came from what is called the reserve pool. That is the pool of teachers that are out there who are certificated, who are available to teach.

We found a similar statistic in New York, where again approximately 80 percent of their teachers, new to the profession, came from, again, the reserve pool.

This reserve pool is a phenomenon that has to be very closely studied in terms of what is out there, and what is out there by level of specialization. But I think that that accounts for the difference.

There is also a discrepancy in terms of the percentage, the annual calculation in terms of attrition. The NCES said about 6 percent a year. The Rand study said about 9 percent a year. But again, the numbers of teachers coming into the field are going to be seriously impacted by the numbers that are currently available in that reserve pool.

Senator **Pell**. Dr. Haynes, your testimony stated that adequate Federal programs already exist on the problem of a lack of minorities in the teaching profession. But the statistics that we have seen in the past would show that we have far too few minority teachers. How do you account for that fact that everything is all right when the statistics go the other way?

Mr. **Haynes**. Mr. Chairman, I did indicate that we do recognize there is a shortage of minority teachers, in my statement. And I feel that we do have programs in place designed to address that. For example, under the Eisenhower mathematics and science education State grants, there is a specific authorization for school districts to use funds available for elementary and secondary programs to recruit and retain minority teachers to become science and math teachers.

An estimated $45 million will be spent in 1991 for training programs under the Bilingual Education Act. The educational handicapped, special education personnel development program is also supported as a priority to train personnel to serve minorities and other special populations. In addition, the department is requesting an additional $64 million, or an increase of almost 14 million—I am sorry—for programs to encourage minority participation in graduate programs, including Douglas teacher scholarships, something that Senator Simon made reference to a minute ago. And also the Harris graduate fellowships and minority participation in graduate education and graduate assistance in areas of national need.

So, as you see, Mr. Chairman, we do have programs and proposals that we are considering and are implementing that do address this shortage. We know that the shortage exists, and we are very concerned, and we have got to address this matter.

Senator **Pell**. I will turn to our ranking minority member, Senator Kassebaum.

Senator **Kassebaum**. Thank you, Mr. Chairman.

Dr. Haynes, excuse me for my voice. I apologize.

You say you do not believe there is a shortage of teachers, and you gave some reasons why—that there is this reserve pool, and so forth. What troubles me is that there seems to be a real shortage of talented students who are going into teaching.

I spoke last spring at Oklahoma to the 100 students that had been selected by Senator Boren as the top students in Oklahoma. I asked how many of them were planning on going into teaching. I believe two hands out of the hundred went up.

Maybe he gave that example when he was speaking. He followed through and asked, if they had scholarships, how many would go into teaching. And more hands went up. I have not personally believed that it was a lack of scholarships, because there are many scholarships available and programs that are going, in some instances, unused. I do believe that we have gone through a period where we are not attracting the best and the brightest into teaching. Part of it is, I think, low salaries. Part of it is that we have, I think, expected too much from teachers other than just the skill of teaching.

I think, third, we have as a Nation diminished the respect for the profession of teaching that is so needed.

I do not mean to be giving a speech. I agree with many of the points that you made in your comments. One of the reasons I am cosponsoring both of the bills, Senator Pell's legislation and Senator Kennedy's, is not that I agree with all parts, but I think that it is very important for us to focus on what I believe is a problem. There are many facets to it.

Would you not agree that there is a lack of talented students coming along who are entering the teaching profession?

Mr. **Haynes**. Senator Kassebaum and members of the committee, as you know, the President and the governors just agreed on a set of national goals designed to increase and expand the number of high school students by the year 2000 and also to raise the achievement level. One of the problems that we are having, as you know, based upon the NAEP reports that we have issued, the reading and writing levels, the problems that we are having with geography, we are not graduating enough students at the high school level who have the competencies and the abilities to do a number of things. So, as you indicated, it is multifaceted.

We would have more talented people available for a variety of things if we could graduate more of them at the high school level.

I often say in my comments that it is very difficult for universities and colleges to address remedial education because they are not structured to do that. As I go around the country, they tell us that that is one of their fundamental problems, that students who come out of high school are not properly prepared to do college level work. That is one of the issues that I think we have to keep before us. The question of the shortage has something to do with what we are putting out. And that we have to do something about.

I think the President and the governors have agreed on a strategy, at least goals have been set, and we have to work toward achieving those goals.

Senator **KASSEBAUM**. Did you mention some joint efforts between school districts and higher education to enhance teacher performance? I wonder if you could elaborate on that. Being a former school board member, I am interested in that.

Mr. **HAYNES**. Senator Kassebaum, we are very encouraged by some of the late developments that have been happening between higher education and local school districts. Boston University, for example, is now involving itself in the school district there in Massachusetts; Chelsea, I think it is.

I am just back from a couple of speeches and meetings in which the University of Kentucky, for example, has established a relationship with three junior high schools in Lexington. The University of Toledo in Ohio has established relationships with schools.

Increasingly, I think, the higher education community recognizes that it has to get involved in this issue. I think we are going to see much more of that.

In the Fund for the Improvement of Postsecondary Education we are supporting some demonstration grants for school college partnerships. So, we are encouraged by the response of the higher education community. They realize that they have got to get involved if their talent pool is going to improve.

Senator **KASSEBAUM**. I agree. I think it is encouraging to see some of these initiatives and recognize some of the risks that are being taken to be innovative and see what works and what does not work.

I would just like to say this in closing. I really do not know that we can correct some of the problems with legislation from Washington. Much of education is local and State, as I think it should be. I would just like to give an example of what a teacher who has taught for 22 years in elementary education in Wichita said to me. She offers a very thoughtful analysis of teaching.

She said that the school curriculum extends way beyond the basics. What the teachers are being asked to do, for instance, today as part of an intended six-hour teacher-pupil instructional time is: one, Learn Not to Burn curriculum; international fair; danger stranger program; police liaison program; bike safety; AIDS curriculum; science fair; art fair; happy healthy kids program; constitutional contest; world book writing contest; red ribbon drug-free walk; mathathon; fire prevention assembly; geography bee contest; eye screen; ear screen; dental check; drugs; and so forth. This is a burden that teachers did not have to handle when I was going through school.

I think if we are expecting them to be all things to many different people, we are going to have to assist them in many ways above and beyond loading further burdens on them.

Thank you.

Senator **Pell**. Thank you, Senator Kassebaum.

Senator Simon.

Senator **Simon**. Thank you, Mr. Chairman.

Dr. Haynes, I do not mean to pick on you because you are the messenger bearing the bad news here. But I have to say the statement is, I find, a totally unsatisfactory statement. When you say that we are addressing problems that do not exist, we have a problem in attracting quality young people into teaching, that Senator Kassebaum talked about. And we should not pretend that we do not have that problem. Maybe these bills need to be modified, but we are just not going to drift and get there.

You talk about the programs that are trying to get minorities into teaching. I helped to create some of these programs.

Even with what we have right now, 10 years from now one third of the students are going to be minority students, and 5 percent of the teachers are going to be minority teachers. Now, we just cannot pretend that that is not a problem, that that does not exist. And we cannot pretend that the present programs are going to solve that problem.

When you say that these bills offer no coherent vision, real candidly, that is as good a summation as I can give you of where the Bush administration is in the field of education. There is no coherent vision. We have a summit conference with the governors. I do not know if anybody has ever thought, maybe we ought to have a summit conference right here in Washington, DC, and get Senator Kassebaum and Senator Pell and get the leaders of Congress in the field of education sitting down with the President and the Secretary of Education. And let us have a dream for this country. And let us do what we need to do.

If you take the school lunch program out of the education thing, 2 percent of our budget goes for education. Is that adequate in the kind of needs that we have?

The President gave a great State of the Union message. He talked about education. But the budget gave a different message. It did not even keep up with inflation, in education.

Authorization is at 40 percent funding. We are at 9 percent funding today.

I think we have to do much, much better than we are doing. I hope that you can take a message back to the Secretary and to our friends at OMB—and I know that that is where a lot of these messages come from—that we are going to have to do better in this

Nation than we are doing right now. If they want to modify this a little bit, fine; but otherwise, if the administration is not willing to come in and say, these are constructive alternatives and this is the way we can go, then I think you are going to see Congress just grab the ball and run with it.

It would be much better to have the administration sit down with those of us in Congress who are interested in this field of education and say: let us work out a bipartisan program. That is, frankly, what is happening in the field of foreign affairs much more; we are sitting down with Jim Baker, with the administration leaders, and we are saying: let us work things out.

I think we need to do the same thing in the field of education.

I am giving you a lecture instead of asking questions, Mr. Chairman, but that is the end of my—let me just ask a question.

What do you think, Dr. Haynes, of the idea of having a summit conference, not just with the governors but with the actors right here in Washington on the field of education?

Mr. HAYNES. Senator Simon, we have, I think, finally recognized in this country that education is indeed a priority. It took the President, of course, to raise that issue at the summit back in Charlottesville. And every American has a view on education. That is part of the problem we have. There really are no correct views. We all know that we need to improve in some way, a meaningful way, and that we have got to have full participation.

I would like to talk about three A's that I think we are all concerned about. The first A is access. The second A is achievement. And the third A, most important, is accountability.

And so, in response to you, anything we can do to address all three of those concerns, of course, I am for that.

Senator SIMON. It is a very diplomatic answer. It did not answer my question.

I would hope that you would go back to the Secretary and to the President and say: What about a summit conference here in Washington, DC, with the leaders in the field of education? And let us see if we cannot put together something that really gives this Nation a vision. Your words: no coherent vision. They describe precisely where we are right now at the national level on education. I want to change that.

I want to work with the administration in changing it.

Thank you, Mr. Chairman.

Senator KASSEBAUM. Mr. Chairman, I wonder if my good friend from Illinois would yield just a moment?

Senator SIMON. Yes.

Senator KASSEBAUM. I would like to remind you that 90 percent of education funding does come from the States. I think President Bush probably had it about right when he met with the governors, because, as you know, it is the governors who really have an enormous responsibility for education in their States.

Senator SIMON. I am not opposed to meeting with the governors. I am not at all sure that the present level of Federal funding indicates what ought to be happening. Maybe my good friend from Kansas and I might differ on that. But I think the dream has to come from the national level. We need to have not just dreams; we need to do concrete things to achieve those dreams. And I do not see them happening, candidly.

Thank you, Mr. Chairman.

Senator PELL. Thank you very much.

I would like just to add that the idea of a summit conference, even if we only contribute 10 percent or 25 percent or whatever the figure is, it would still be of value. I regret, as I said earlier, that the working relationship between the staff people on the Hill and the administration leaves a great deal to be desired. It is not improving. It is, if anything, deteriorating.

I would like to see us work together more in this legislation and not have each side at a distance, as I think we have now.

I would like to put into the record the statistics, 4 percent of our gross national product goes into education, 2 percent of the total Federal budget, which is not enough.

Thank you very much indeed.

Mr. HAYNES. Thank you.

Senator PELL. We now come to the next panel: the Lieutenant Governor, Val Oveson, of Utah—we are very honored to have you here—Dr. Troy Earhart, commissioner of the Rhode Island Department of Education, from Providence, and I am very, very glad to see him, and thank him for his cooperation; Mr. John Cooke, president of the Disney Channel, who is doing a truly excellent job in that connection in Burbank, CA, and is well known to the chairman; and Mrs. Mary Ann Smith, director of the Bay Area Writing Project, University of California, Berkeley, CA.

Perhaps because of the tendency of Senators to talk at some length, our time is more limited than we would have hoped; so, I hope you will help us in that regard. We have another panel to follow.

Senator SIMON. Mr. Chairman, I am going to have to leave before all the testimony is over. I just want to apologize in advance to the witnesses. I wish I could stay to hear all of you. As an ex-lieutenant governor, I particularly welcome the lieutenant governor here.

Senator KASSEBAUM. Mr. Chairman, unfortunately I am, too, and my apologies. In the next panel we have Dr. Jerry Bailey, who is Associate Dean of Undergraduate Teacher Studies in Teacher Education at the University of Kansas.

Senator PELL. Thank you.

I would also say that Senator Kennedy, chairman of our full committee, will not be here but wants to submit questions for the record. We will leave the record open for any of our colleagues who would like to submit questions.

[Responses of Mr. Martin to questions asked by Senator Kennedy follow:]

Responses of Dallas Martin to Questions Asked by Senator Kennedy

As you and your committee continue to consider S.1675, the Excellence in Teaching Act, and S. 1676, the National Teacher Act," I wanted to take this opportunity to respond to a question posed by your staff. The question raised was: Would undergraduate students generally perceive their scholarship benefits offered through S.1675 differently than they would the "loan forgiveness" benefits included in S.1676? In part, I am certain that this question was raised because of comments I make on February 22, 1990 before Senator Pell's Subcommittee on S.1675, noting that research shows that most students from lower socioeconomic families do not perceive student loans as a positive means of helping them to pay for college. Therefore, I would like to clarify this issue and respond to the question raised.

The link between admissions and financial aid is clear in that students often make their college choice on the basis of the financial aid offered to them and the manner in which aid administrators present aid options. Research shows that financial aid is an important factor in college choice and persistence, particularly when the student's socioeconomic background is taken into consideration. Not surprisingly, students from lower economic backgrounds, particularly minority students within this category, tend to be more concerned with tuition costs, location of the school, and other practical considerations than students from more affluent economic backgrounds. From the standpoint of "college persistence," research shows that "scholarship or grant" recipients are slightly more likely to persist towards graduation than nonrecipients. A study by A. W. Astin also notes that scholarships and grants awarded on the basis of merit are more likely to increase a student's persistence than those awarded on the basis of financial need. This is not surprising either, since most students who are selected for merit awards generally have attained a higher scholastic record than students whose awards are solely based on need.

The impact of student loans upon a student's persistence is less clear. One study found that students who secure loans are more likely to stay in school than those who do not. Such a finding might be questioned, however, since overall, more upper-class students borrow money than do freshmen. Astin's study found that dependency upon loans adversely affects the persistence rate for men, particularly if the student was forced to borrow during his freshman year. The impact upon women seems to vary depending upon how much they had to borrow and how much their parent contributed to their educational expenses. Small loans to undergraduate women, particularly at public institutions, seem to be of benefit in promoting retention, but large loans are a detriment to all schools.

Astin's findings also seem to suggest that students from lower income families (below $20,000) are far more likely to view loans as a negative factor associated with completing their degrees than are students from higher income families. A student's after-college satisfaction with borrowing also seems directly related to whether the student subsequently enters a profession or a blue-collar or clerical position. A 1972 study by Tombaugh and Troutman found that National Direct Student Loan borrowers who borrowed later in their college careers felt more positive about such borrowing than students who borrowed during their freshman year. They also found that continued favorable attitudes about borrowing were more prevalent among persons who entered a profession after graduation than those who worked in factories, or in construction, or in clerical jobs.

These students may not tell us everything that we would like to know, but data from the research that has been done clearly suggest that the type and mix of financial aid provided to a student can have either a positive or negative influence upon that student, depending upon the student's circumstances and background.

In addition, let me note that College Work-Study awards and student employment also contribute positively to student retention. Astin's study notes that having a job for fewer than twenty-five hours per week substantially increases a student's chances of finishing college. In fact, his study indicates that a student's dropout probabilities are reduced by as much as 15 percent by such employment. Astin also finds that on-campus employment, either in academic or nonacademic areas, has a more positive impact on persistence than off-campus employment. On-campus employment during a student's freshman year in particular seems to enhance the student's chances of completing school. Several additional studies show that student employment does not have a negative impact on a student's grade point average, provided that such work does not exceed twenty hours per week. It is not known why student employment correlates so significantly with persistence, but it is believed that a job helps to develop a strong sense of being needed and of belonging to the community in addition to providing financial support. I only mention this latter point because if there was a way to get Teacher Corps recipients involved and working with mentor teachers and students earlier, then perhaps such an approach could improve persistence and create a positive linkage between the student's educational program and his or her entry into the teaching profession.

With this background, let me now attempt to respond to the question that was raised. Clearly, I believe that most students would perceive a scholarship, as proposed in S.1675, as a more positive inducement for them to complete their education than they would a loan, even with forgiveness provisions. Assuming, however, that the amounts of the scholarship and the loan were the same, and that both required five years of service in a defined need area to obtain the full benefit of each, then there is really no difference to the student. However, I would make the following observations.

First, if a teacher corp recipient does not fulfill the service obligation, then the recipient has to repay the pro-rata amount of the scholarship at the highest rate applicable to loans under Part B of Title IV of the Higher Education Act in accordance with a repayment schedule prescribed by the Secretary. This would mean that the teacher corps scholarship recipient would, in all likelihood, be paying the higher interest rate normally associated with an SLS or PLUS loan than would a borrower who had a Stafford Loan. In addition, the Stafford borrower would be eligible for deferments that should not be applicable to a teacher corps recipient who has scholarship repayment.

Second, counseling of recipients under either bill is essential if we want the students to fully understand the full range of options and advantages available to them as well as their obligations if they do not "teach" in eligible need areas. Students who receive Stafford Loans are fully advised that it is a loan and therefore must be repaid unless the person is eligible for loan forgiveness. Students who receive grants or scholarships, on the other hand, normally perceive these awards as "free monies" without any service or repayment obligation. Therefore, if Teacher Corps Scholarship recipients are not clearly advised of their service obligation, they will more likely contend that: "they did not know it would become a loan!" This may not be a problem if we have proper disclosures and provide potential recipients with all of the information outlining their rights, responsibilities, and choices, but it should be considered to avoid future challenges to collection efforts.

Third, I would observe that while the scholarship will probably be perceived more positively than a loan with forgiveness features, the fact that the scholarship is not available to freshman or sophomores still does not preclude the likelihood that the student will have to borrow during their first two years of college. For many students from low-income families, this approach will not address their more immediate up-front concern of whether or not the type of financial aid available to them is a positive inducement to encourage them to pursue a postsecondary education at all. Therefore, I believe that if we hope to encourage more low-income and first generation minority youth to enter higher education, then we need to seriously reduce reliance upon loans during the first years of undergraduate education.

If I can assist you or your staff further, please feel free to call upon me. Again, thank you for your continued support on behalf of the nation's educational system.

Senator PELL. Senator Hatch went to Utah today to be with his mother, who has not been well, and has asked to be excused and gives his particular regards to Governor Oveson.

We will start out with Lieutenant Governor Oveson, if we may.

STATEMENTS OF W. VAL OVESON, LIEUTENANT GOVERNOR, STATE OF UTAH, SALT LAKE CITY, UT; J. TROY EARHART, COMMISSIONER, RHODE ISLAND DEPARTMENT OF EDUCATION, PROVIDENCE, RI; JOHN COOKE, PRESIDENT, THE DISNEY CHANNEL, BURBANK, CA; AND MARY ANN SMITH, DIRECTOR, BAY AREA WRITING PROJECT, UNIVERSITY OF CALIFORNIA, BERKELEY, CA

Mr. OVESON. Thank you very much, Mr. Chairman. It is a pleasure for me to be here representing what I consider not only the State of Utah but the West and rural America, the West particularly as we look at rural issues. That will be mainly what I will talk about.

We certainly agree, Senators, that there is a problem, the problem that we need to address in this country. And I certainly do not need to go through the statistics and all of the issues involved with the crisis we have in math and science education and all of the other areas. I do want to point out that we cannot address recruitment in isolation. We need to look at the whole picture.

Particularly we need to look at rural America as well as the urban issues. There are some differences, and yet there are some similarities. We are having as much difficulty in recruiting and retaining rural school teachers and training them as you are in the urban areas. So, I hope that you would not forget that in the bill. I know you have been responsive to that, and we appreciate it. But we do need you to be cognizant of that.

I could go through a lot of demographic statistics about Utah that are unique to the Nation. One of the most interesting ones probably is that in the last 10 years we have increased our school age population by 32 percent while the Nation as a whole has been declining in school age population.

We have been increasing the number of teachers very rapidly because of this, where the rest of the Nation by and large is dealing with scaling down or not as many teachers. This is creating unique problems for us that we are addressing at the State level.

What we would ask from you here today is that you recognize that there are differences—there are differences among the States—and that you give us the maximum level of flexibility through this bill and others that you would pass to address these very critical issues.

I would like to turn now to one of our favorite subjects in the State of Utah from the administration, and that is the bottoms-up approach to managing in education versus the top-down approach. We have had the courage, the governor has had the courage, and I am fully supportive of him in doing that, to pass a block grant program, where we are passing through all of the State dollars to six districts on a pilot basis. We are asking the Department of Education to cooperate with us in that in cutting the strings at the Federal level as well so that we can pass the entire school budget down to a local district and let them decide what they are going to with that money.

I respectfully but very strongly disagree with Senator Bingaman earlier today when he said what we need is stronger controls and stronger requirements at the Federal level. I am very supportive of the governors, the President, the Congress, in setting a national vision, a national standard, and then having testing and assessment that judges us against that standard. But we need to leave the details of how those programs are structured and what is done to the local teachers.

We have even challenged the local district boards and district superintendents to pass the money on to the school in keeping with site-based management principles that we think are the salvation to the crisis in education. The best run companies in this country, including Disney, have learned that if they empower their employees at the lowest possible level to make the decision that they can make, to buy into the system, that is where we will get the innovation and the response that we are looking for.

What we need to do in this country is to get our patrons, those that have students in the schools, and I have four of them, to buy into the changes that need to be made, to reduce time for extracurricular activities, to reduce the time for sports and to increase time for mathematics and science education. That has got to come from the parents, and the parents have got to make a buy-in to that. That cannot be legislated from Washington, DC. It cannot be legislated from Salt Lake City. It has got to be done in every little hamlet and village in this country.

Setting a national vision, yes, setting a national standard, the testing is critically important; but we would very strongly ask that you consider that bottoms-up kind of management and the maximum flexibility.

Thank you very much.

Senator PELL. Thank you very much indeed, Governor Oveson.

Without objection, your written statement will be inserted into the record.

[The prepared statement of Lt. Governor Oveson follows:]

Testimony of W. Val Oveson

Lt. Governor of the State of Utah

Before the Subcommittee on Education, Arts, and Humanities

I appreciate the opportunity of testifying before this committee on a subject of such major importance as teacher recruitment, retention and training. The quality of our teacher force is the key to the quality of education in this country.

One of the difficulties in addressing problems in education is that no single issue, such as teacher recruitment, can be addressed in isolation. One of Newton's laws of physics states that for each action there is an equal and opposite reaction. This also appears to be true for the restructuring of education. As one issue is addressed, a domino effect occurs which affects many other areas of education. Therefore I cannot address the area of recruitment without discussing other areas as well.

In Utah we are faced with unique population demographics unlike any other state. For example:

> Utah has had an increase of 32 percent in students in the past ten years due to both natural increase and in-migration. The nation as a whole has experienced declining enrollments.
>
> Utah has the highest proportion of school age children in the country.

Utah taxpayers must support 50 percent more children per taxpayer than the average of other states.

Utah has hired a large proportion of new teachers in the past five years because of the growing school population and major changes in the retirement system which encouraged early retirement.

In a recent issue of Money Magazine, Utah was listed as ranking sixth highest in personal income and sales tax.

As you can see Utah has some major problems facing it in education because our tax base has been strained to the limit to support our increasing school population.

Utah also has some major variations in the size of school districts, both in population and geography. Some of our school districts are as large geographically as the entire state of Rhode Island. Others are very small urban areas. Student enrollment ranges from 200 to 81,000. The problems of rural and urban districts in teacher recruitment are decidedly different.

I understand that there has been a great deal of discussion about the problems in urban education and inner city schools. I would like to emphasize the problems which exist in rural areas in this country. Utah conducted studies on the educational attainment of students in urban areas contrasted with students in rural areas. These studies indicate that students in rural Utah do not receive a comparable education to students in urban Utah. This is a result of the fact that there are fewer course offerings, teachers generally are less experienced, and in many cases are teaching outside of their areas of expertise, and often students spend long periods of time on buses before and after school. This problem is as serious in terms of educational quality as the problem facing inner city schools.

With these decidedly different circumstances, it is crucial that states be given maximum flexibility and autonomy in meeting local needs of students, teachers, and the community. Teachers in rural districts are often required to teach six or seven different courses during the school day which means that they must spend a lot more time in preparation for their classes. In addition to having to teach many different courses in their assigned subject areas, many rural teachers must often teach classes which are not in an area where they are either certified or qualified. These teachers also live in areas which are very distant from institutions of higher education, so that they cannot get access to additional training in their assigned subject areas. They can often only gain further training by leaving their homes and going to residential programs for the summer.

Many of our smaller school districts serve as training grounds for larger school districts. Teachers who do an excellent job in the rural schools are likely to be the best candidates for good job opportunities in larger urban districts, where many of these teachers will go so they can have the benefits available in more populated areas. Although this is a benefit to the larger school districts, it creates serious problems in terms of a stable school environment for smaller rural districts.

One avenue for increasing stability in the rural teaching force is to provide for alternative certification routes and to increase the availability of training in local areas. This will enable residents in rural areas to gain certification and entrance into the teaching profession. Native residents are more likely to stay in the sparsely populated areas and provide a stable workforce of people committed both to the teaching profession and the community.

Another problem which rural areas have is that they generally have a much lower tax base, which means that revenues from property taxes, sales taxes, and local income taxes generate less revenue per student than in urban areas, where large businesses and corporations add significantly to the tax base. Although state finance formulas take this lower tax base into account when distributing state funds, there is still not enough money to make up for all of the revenue shortfall. Rural areas often cannot hold class size at a level high enough to be efficient. This means that it costs more per pupil to provide services. These two factors together mean that teacher salaries in rural areas tend to be much lower than in urban or suburban areas. Therefore it is difficult to attract the best qualified teachers.

Inservice training is another difficult problem which rural districts have. Teachers wanting inservice training during the year are often prevented from getting it because of the distance and time involved in accessing institutions of higher education, or even areas where a number of people can congregate without having to travel long distances. Usually inservice training can only be provided by having people from urban areas fly in to offer a few courses which may be of benefit to some teachers. For teachers not familiar with the subject areas they are teaching, the lack of availability of inservice training is a further disincentive to continue teaching in rural areas.

Utah has made major efforts to address problems in rural areas at the state level. Additional state funds are provided to districts which must run small schools out of necessity. Optional tax levies at the local district level are augmented by state funds to lessen the disparity with wealthier districts. Grants in state funds often have a guaranteed base so that smaller districts can be assured a minimum level of funding in various programs. The increasing use of technology has also helped to provide access to inservice training. In addition the state has made major strides in providing flexibility of state funds and regulations. Under a pilot block grant program, districts in the state have agreed to accountability requirements in exchange for decreasing state regulations.

Any programs which entail scholarships or forgiveness of loans need to be open for regulations outlined by each state, so the state can recruit teachers in those academic and geographic areas which will be of most benefit. These programs need to have maximum flexibility at the state level in order to meet the changing needs of the local school districts.

I encourage you to remember the needs of rural areas as you work to provide programs which address the problems of teacher recruitment, inservice training and retention. It is also important to remember that many of the schools in rural areas will not qualify for funds from Chapter 1 because they do not have high concentrations of poverty. Consequently, I strongly encourage you to provide a great deal of flexibility to states as you finalize this legislation and prepare it for passage.

I salute efforts which have been made within these bills to allow states to tailor these programs to their individual needs and encourage you to expand this effort even further.

Senator **Pell**. Dr. Earhart, a particularly warm welcome, to my fellow Rhode Islander. We will probably be on the same plane going back this afternoon.

Mr. **Earhart**. Mr. Chairman, members of the subcommittee, thank you for this opportunity this morning to testify in support of legislation introduced by you, Mr. Chairman, and Senator Kennedy that would significantly improve our abilities in this country to recruit, to prepare and to keep good teachers in our classrooms.

I am testifying today as Rhode Island's Commission of Elementary and Secondary Education and as a member of the Council of Chief State School Officers. The Council, as you know, is a Washington based national organization comprised of the officials who head public education in our States, territories and the District of Columbia.

The testimony that I have submitted for the record of this hearing contains my strong personal support and the strong support of the Council of Chief State School Officers for the National Teacher Act of 1989, submitted by Senator Pell, and the Excellence in Teaching Act, submitted by Senator Kennedy. Both bills represent solid strategies for dealing with the critical issues facing us in the areas of recruiting and retaining teachers, particularly minority teachers, and for the proper preparation of all teachers. Both bills rely heavily on the State education agencies to administer the programs being proposed. This very strong connection with these Federal initiatives and the States across this country will insure that these programs and reforms in the States currently under way are properly integrated for the maximum effectiveness.

I would like to take a few minutes to talk about what we think is a very exciting initiative in our part of the country.

A couple of years ago the commissioners of the New England States and New York, with the assistance of the federally funded Regional Laboratory, began having some discussions about common issues and possibly setting some common goals for our region. We were concerned at the time about actual shortages in some critical teaching areas, potential shortages in others. We wanted to look at how we could work in the region to improve conditions for teachers, how we could work to improve the quality of teaching in our region, and the quality of learning for our children. The result of these discussions is what is known now as the Northeast Common Market Project.

We are working, as I said, with the assistance of the Regional Laboratory in a number of areas, but I want to concentrate on two this morning.

One is the common certificate throughout the region, and the second is pension portability. As of April 1, a teacher who has a certificate in one of the New England States or New York will be able to obtain a regional teaching certificate allowing him or her to teach in any of the States in our region. This will be permissible for a period of 2 years in which time that teacher will have to meet the State's specific requirements.

Also beginning April 1, a regional clearinghouse will be established at the Lab, which will be computer based and which will allow us to track information throughout the region about teacher shortages, teacher openings and teacher availability.

In terms of next steps on the credential, we have already begun to see if we can eliminate all of the requirements throughout the region so that a common certificate would become eventually available. We are also looking at regional certificates for administrators based not on current requirements in the States but on the kind of characteristics we believe that our administrators should possess.

We are very excited about these developments and are looking forward to providing a model for the rest of the country in this area.

With respect to pension portability, this is one of the areas we identified as something we should look at to improve conditions for teachers and to allow them the opportunity for greater mobility. The Rhode Island General Assembly last year passed a pension portability bill that would create absolute portability with any other State that passes the same measure. Currently, Massachusetts has pending in its legislature that same bill. If it passes, and we hope it does, then teachers and other educators in the pension systems of those two States would have complete portability of those pensions.

We are hoping that other States throughout the region will follow suit.

By improving these conditions, these types of conditions for our teachers, we believe that we will help attract more and better teachers into the profession and, just as importantly, to keep them there for lifelong careers.

The Federal initiatives that we are talking about here today, along with State reforms under way, can indeed enhance our Nation's first line of defense, our classroom teachers.

Thank you.

Senator **Pell.** Thank you very much indeed, Dr. Earhart.

Without objection, your prepared statement will be inserted into the record.

[The prepared statement of Mr. Earhart follows:]

Prepared Statement of J. Troy Earhart

Mr. Chairman, members of the Subcommittee, I am pleased to testify today on behalf of the Council of Chief State School Officers (CCSSO) and the Rhode Island State Department of Education concerning legislation you and Senator Kennedy have introduced to enhance the supply and training of teachers in America. Our Council commends you and your colleagues for your leadership in developing and urging Congress to act on teacher recruitment and training legislation during this session of Congress.

S. 1675, the Excellence in Teaching Act and S. 1676, the National Teacher Act are most timely and well-targeted to our national teacher training needs. They are essential to the success of restructuring American education. They provide an important expansion of the federal commitment to teacher training, a commitment which has impressive precedents going back to enactment of the National Defense Education Act in 1958.

We commend particularly the following general provisions of these bills:

o Teacher Corps and Senior Teacher Corps programs for state education agencies to award scholarships to recruit highly qualified individuals for teaching in geographic or skill areas of shortage, and enable experienced teachers to enhance their professional development;

o Student loan forgiveness programs for teachers who serve in areas of high poverty and educational disadvantage;

o Professional Development Academies for local education agencies and higher education institutions to form partnerships and receive grants from state education agencies to strengthen in-service staff development;

o National Teacher Academies for professional development in ten high priority subject areas, and Congressional District Teacher Academies for state education agencies to compete to operate on-going, year-round inservice training programs for teachers; and

- Model Programs in Teacher Preparation and Promising Practice and other programs of support by the U.S. Department of Education for research and demonstration of innovative teaching and school management methods.

Both S. 1675 and 1676 rely significantly on state education participation and administration. This will assure efficiency and the successful integration of federal initiatives with state recruitment and training programs, certification practices and educational reform efforts underway. This administrative structure is essential.

We commend especially the provisions of these bills to support the recruitment and training of talented minorities for teaching. Our Council is one of nine organizations which form the Task Force on Minority Teachers. We have advanced recommendations to increase the numbers of minorities qualified for and serving in elementary and secondary teaching. These recommendations, which I submit for the record with my testimony, have been adopted by the Forum for Educational Leadership and the Higher Education Secretariat. The action of all these higher education and elementary and secondary education organizations is an unprecedented effort by the education community to unite in response to this extraordinary need.

The general provisions of S. 1675 and 1676 provide a special focus on actions to meet the critical shortage of minorities in teaching. In addition, Title III of the Excellence in Teaching Act and Title IV of the National Teacher Act are directed at the urgent need to recruit minorities for teaching and provide for their professional development needs.

NORTHEAST COMMON MARKET PROJECT:

Within the next decade, over one million teaching positions will have to be filled nationally. The ability of the nation to fill these positions is being questioned by many researchers.

This concern at the national level is also reflected in the Northeast. Some states in the region are experiencing shortages of special education, bilingual, and vocational teachers, as well as librarians. The region is also concerned about the quality of the individuals who will be teaching in classrooms and administering schools of the future.

Most states within the region have increased their certification requirements, implemented teacher testing programs, instituted programs to bring the "best and the brightest" into the profession, or provided support to beginning teachers or administrators in attempts to assure the supply of high quality educators who will provide high quality education for our children.

Recent studies of supply and demand in the region suggest that the Northeast states constitute an interdependent or interlocking network of educators. Realizing that policies implemented by one state may impact neighboring states the chief state school officers of New England and New York, in the fall of 1987, asked the Regional Laboratory for Educational Improvement of the Northeast and the Islands to assist them in responding to this regional problem. The response has taken the form of a two-year effort called the Northeast Common Market Project. The project's primary goal is to improve the quality and professional status of educators and the quality of education for all of the region's children.

THE GOALS FOR THE PROJECT ARE:

- A more highly prepared educator labor force;
- A more diverse and mobile educator labor force; and
- The development of an interactive, regional data base on the supply and demand of educators and policy simulation software that will aid in predicting future shortages and excesses in time for regional action.

A MORE HIGHLY PREPARED EDUCATOR LABOR FORCE

To achieve the goal of a more highly prepared educator labor force, three initiatives have been proposed by the Commissioners. One initiative calls for the development of regional mentor teacher training materials and evaluation designs. Secondly, the Commissioners have proposed the development of visionary, regional standards for administrators. These standards will:

- Allow for flexibility;
- Increase access to the field; and
- Be measured not just by courses, but by peer review assessment, portfolios, and /or exhibitions.

The Commissioners have asked their staffs and the staff of the Lab to work with representatives from higher education to develop standards for outcome-based teacher preparation programs for the region. These initiatives will provide a continuum of learning for educators that begins with preservice education, progresses to induction programs, and is complemented by appropriate staff development opportunities for all educators throughout their careers.

A MORE DIVERSE AND MOBILE EDUCATOR LABOR FORCE

Two activities have been initiated by the Commissioners to enhance the mobility of educators within the region. A Northeast Regional Credential (NRC) and a regional educator clearinghouse will be implemented on April 1, 1990. In order to implement the Northeast Regional Credential, the states have entered into a contract with each other. The Commissioners or their designees are responsible for establishing the comparability of the authorization, scope, and requirements of certificate/license titles across the seven states and determining the Northeast Regional Credentials.

Effective April 1, 1990, the Northeast Regional Credential, available upon request to any educator in the region who holds a valid state certificate form any of the seven (7) states in the region, will enable its holder to teach in any of the other six (6) states. The credential will be valid up to two (2) years. During the two year period, the individual who holds a Northeast Regional Credential would have to qualify for certification in the state in which he/she is employed. Currently, twenty-three (23) NRC titles have been agreed upon by the states. Efforts are underway to work towards the development of a "second generation" Northeast Regional Credential that would transcend existing certification regulations by eliminating the need for state-specific requirements. This "second generation" NRC would be grounded in a common set of standards for the approval of teacher preparation programs and requirements for the certification of educators within the Northeast region.

On April 1, 1990, a clearinghouse will be established at the Regional Laboratory to store and retrieve information relating to Northeast Regional Credentials. A major function of the clearinghouse will be to track regionally credentialled educators and study the effectiveness of the regional credentialing process as it relates to educator mobility. The clearinghouse will provide a one-stop marketplace for local superintendents within the region. Superintendents will be able to access the clearinghouse data bank to fill needed positions in their districts with qualified NRC holders, including recruiting minority educators and educators who are certified in specific shortage areas; ie. special education, bilingual education. NRC holders will be able to determine the availability of teaching positions within the region.

Finally, the adoption of pension portability within each state in the region has been encouraged by the Commissioners. Last year, the Rhode Island General Assembly passed legislation to enable the state to enter into a compact with any other state to make pensions portable. The New Hampshire legislature passed a bill to enable educators who enter the state to buy into its pension system. The Massachusetts legislature is considering legislation that would allow it to enter into a compact with Rhode Island.

SUPPLY AND DEMAND OF EDUCATORS

By September, 1990, the states in the region will have access to an interactive, regional data base on the supply and demand of educators and policy simulation software that will aid in predicting future shortages and excesses in time for regional action. Staff at the Massachusetts Institute for Social and Economic Research (MISER) have been working with the Northeast Regional Lab and the seven (7) states to create the data base and the software. MISER will prepare individuals in each state to maintain and utilize the data bases and software beyond the life of the project.

As the Northeast Common Market continues to develop, state-level policy makers, professional associations, and other interested parties will be asked to become involved.

Significant outcomes of this project are anticipated. At the local level, the Northeast Regional Credential and the clearinghouse will enhance mobility, offering a larger array of prospective candidates for any teaching vacancy; increase competition; and improve the quality of staff in schools. At the regional level, both activities provide a foundation for future efforts to improve the quality of education in the Northeast under the sponsorship of the Northeast Common Market Project. This improvement in the quality of education will be accomplished through the development of visionary regional administrator standards, regional program approval standards for institutions of higher education and mentor teacher programs. On the national level, the Northeast Regional Credential offers a model for the development of an improved certification process and a means to the professionalization of educators.

Mr. Chairman, I hope this regional example of the Northeast Common Market project demonstrates the commitment of the states to work with you and your proposed legislation to improve teaching and learning throughout this nation. Thank you for listening to my views today on these critically important issues.

PROPOSED FEDERAL ACTION TO INCREASE THE NUMBER OF MINORITIES IN ELEMENTARY AND SECONDARY TEACHING

Statement of Need

The number of minority teachers in American elementary and secondary schools is declining, as is the proportion of minority teachers. The decline occurs at a time when the proportion of minority teachers to total teachers is significantly lower than that of the minority students to total students and a time in which the proportion of minority students, especially those at risk, is steadily increasing.

Urgent actions are needed at federal, state, and local government levels and by institutions of higher education to increase the numbers of minorities qualified for and serving in elementary and secondary teaching for the following reasons:

1. **To assure that a substantial portion of talented and qualified persons from all racial and ethnic groups are teachers;**
2. **To increase the number and proportion of minority role model teachers with special impact in helping minority students to succeed in education, at least through graduation from high school, and to pursue higher levels of education; and**
3. **To increase the number of minority teachers so that all elementary and secondary students will have experience with these role models, thereby advancing multicultural and multiracial understanding and appreciation.**

Proposed Action

National leadership is essential. Federal resources must be provided in partnership with states, localities, and institutions of higher education to support initiatives over a least a ten-year period. The proposed action includes three major parts. The first provides incentive awards for minority candidates in undergraduate and graduate study preparing to teach. The second provides support of programs and projects which introduce minority students in grades 7 through 12 to a teaching career. The third provides support for institutions of higher education, in conjunction with elementary and secondary schools, to enable minorities to use career ladders combining study and employment or make professional changes to enter teaching.

These provisions are not the sole means to solve the problem of increasing the numbers of minority teachers, nor are they considered to be the only steps needed to address the comprehensive problems of qualified teacher supply and demand in the United States. They are, however, the highest priority actions we now recommend.

A summary of the three parts of the proposal follows:

PROPOSED FEDERAL ACTION

I. Demonstration Programs to Increase Minority Candidates for Teaching in Elementary and Secondary Schools

Purpose: To increase the number of minority candidates in undergraduate and graduate programs preparing to teach in elementary and secondary schools.

Eligible Recipients: Institutions of Higher Education (IHE) compete for Federal demonstration grants administered by the State Education Agency (SEA) under an approved State Plan.

Description: A 5-year demonstration program, authorizing $50 million federal funds annually, to be matched 50/50 by nonfederal funds and administered by the States.

The Secretary of Education would allocate funds to states having approved plans which will increase the numbers of minority candidates in teacher preparation programs. Federal funds would be allocated among the states on the basis of the proportion of minority population of the state to the total minority population of the nation.

Each SEA with an approved plan would conduct a competition open to all public and private undergraduate and graduate IHEs, including community colleges, with approved teacher preparation programs. The SEA would select the most promising proposals which commit the institution to increase the number of minority candidates in its teacher preparation program. Priority would be given to institutions with records of success in enrolling and graduating minority students.

Continuation grants would be subject to annual reporting by the recipient IHE of progress made in achievement of the performance standards established in its project.

Grants to IHEs would provide incentive awards to students and the costs of administration and evaluation of demonstration projects. IHEs would make incentive awards to eligible students with a total value of $3500 a year for up to four full-time undergraduate years and $7000 for one full-time year of graduate study. Each incentive award would be used either as a "scholarship" or a "performance payment" or combination of the two as determined by the institution and student. For each student the part of the award used to support the cost of college attendance would be considered a scholarship. The amount could range from $3500 to zero for undergraduate students and $7000 to zero for graduate students. Students using the award for scholarship aid would have to meet the need criteria for eligibility for Stafford Loans under Title IV of the Higher Education Act.

The balance of the incentive award for each year would be reserved by the IHE in escrow for use as a performance payment(s) to be made at the end of each year of elementary and/or secondary teaching completed for which the candidate is obliged to serve.

Performance payments would be non-taxable. If candidates fail to complete their teaching obligation, their escrow accounts would revert to the program and be available for other candidates.

An incentive award would be in addition to any other federal, state, or institutional student aid for which the student is otherwise eligible but the part of the award used as scholarship together with other aid received in any one year could not exceed the cost of attendance in that year. It would not be considered "income" for purposes of calculating eligibility for student aid or taxes.

Incentive awards would be limited to candidates who are in good academic standing,who demonstrate their commitment to teaching by obligating themselves to complete at least one year of service in public or nonpublic elementary or secondary school for each year in receipt of an award as an undergraduate and two years of teaching for one year as a graduate student recipient. Award recipients who decide not to teach must repay the awards received with interest in lieu of teaching.

In any year the total potential demonstration grant to an IHE would be based on the proposed number of minority candidates to be increased over the number for the base year (1988-89) multiplied by $3500 per undergraduate or $7000 per graduate student year award. IHEs would have discretion as to the number of students, level of study and distribution of incentive awards among eligible students.

For administration of the State Plan and for evaluation of the demonstration projects, the state education agency would be authorized to use up to 5% of the state's allocation.

II. Introduction to Teaching

Purpose: To identify and encourage minority students in the 7th through 12th grades to aspire to and prepare for careers in elementary and secondary school teaching.

Eligible Recipients: Local Education Agencies (LEA) through State Education Agencies (SEA).

Description: Federal funds would support projects in local school districts which would include but not be limited to teaching career exploration programs, introduction to teaching partnerships of LEAs and teacher training programs,work-study, teaching assistant or tutorial programs, "future teacher" clubs or activities and special projects to prepare minority students for entry into teaching preparation programs.

Implementation: $25M per year would be allocated among states on the basis of the minority population percentage in each state to the total national minority population with no state receiving less than $50,000. States would award project funds on the basis of competitive applications from local education agencies.

III. Support Programs for Teaching Career Ladders or Career Changes to Teaching

Purpose: To attract minority candidates to careers in teaching elementary and secondary school who are in school support or paraprofessional positions, attending community colleges, or in occupations other than teaching and seek a career change to teaching.

Eligible Recipients: Institutions of Higher Education (IHE) in conjunction with Local Education Agencies (LEAs).

Description: A nationally competitive program to encourage IHEs together with LEAs to design and implement projects to encourage and enable minorities without preparation and qualifications to teach to have such preparation and gain such qualifications. Projects would include but not be limited to coordinated efforts of IHEs and LEAs for paraprofessionals to prepare for careers as licensed teachers while in paraprofessional practice, teaching career counseling services, public information recruitment activities, identifying promising minority students attending community colleges, and career reentry projects with special professional preparation arrangements.

Implementation: $20M per year administered by the United States Department of Education for nationally competitive IHE applications prepared in conjunction with LEAs and endorsed or commented on by the appropriate SEA.

Senator **Pell**. Mr. Cooke, I am glad to see you here.

Mr. **Cooke**. Thank you very much, Mr. Chairman and members of the subcommittee. It is a pleasure to be here. It is an honor to get to come and talk about our program, but in fact we would not have the program, which I am going to outline briefly today, were it not for the members of this subcommittee and your staffs.

I want to talk just briefly about the Disney program and then talk about our motives, which you will find are not altogether completely altruistic. Our views about education are fundamental and our feelings about teachers and how they can be recognized run very deep.

We have an annual national program to honor the American teacher which we started last year. The program is entitled the Disney Channel Salutes the American Teacher. The purpose of the program, which first appeared last year on the Disney Channel and covered a period of 31 weeks, is to foster national recognition and respect for the teaching profession. To this end, the program did and will select and showcase 30 teachers in elementary and secondary schools working with classes representing the diversity of Americans' educational institutions, private and public.

From the 30 composed of three teachers each from ten educational disciplines, one teacher will be chosen to symbolize that discipline in which she performs her teaching duties. And from that ten representing each discipline, one will be selected as the teacher to represent the idea expressed by Henry Brooks Adams: "A teacher affects eternity; he can never tell where his influence stops."

This program was created and is conducted in collaboration with the Center for Civic Education and with representatives from the Nation's leading educational organizations. If I could, I would like to list them: the American Association of School Administrators, the American Federal of Teachers, the Council for American Private Education, the Council of Chief State School Officers, the Council of the Great City Schools, the National Association of Elementary School Principals, the National Association of Secondary School Principals, the National Education Association, the National Parent Teachers Association, and the National School Boards Association.

These organizations help implement this program by having representatives on our Educational Steering Committee, which select the requirements for application, determine the eligibility of candidates, and, along with the Center for Civic Education, organize and administer the selection process. Furthermore, this program has received the support and cooperation of various representatives of the Federal Government, many of whom are in this room.

One might ask what Disney's rationale is for initiating and continuing this program. I have to say unabashedly that we are in the entertainment business, that we know audiences are fascinated by heroes, and we know they are fascinated by heroes who are selfless, sacrificing, and giving of their talents and skills. We believe that good teachers are heroes, and therefore we know that if we present them in a dramatic and a caring way that audiences will find these heroes appealing.

In addition, we believe there remain thousands of dedicated, effective teachers who labors are underappreciated. Often teachers could excel in enterprises far more lucrative, but their love of teaching and learning keeps them in the classroom, sometimes, as we know, under adverse conditions. They are the bearers of the standard of the best of American society. Teachers deserve to be more widely known and honored. We feel that as entertainers and communicators we can help provide recognition, praise, and prestige for the profession.

We are attempting to offer a partial remedy for the underappreciated teachers. Through the process by which we have chosen to salute teachers, the entire profession receives a much-warranted honor. The hope is that this tribute will help audiences understand that good teachers make good schools and that schools are the guardians of the State.

In "The Disney Channel Salutes the American Teacher," we highlight exceptional elementary and secondary teachers representing their peers: in the different subject fields of the school curriculum; in classes representative of diverse populations of today's society; and in each geographic region of the United States.

Also, we expect that this program will inform the audiences and let them know about the challenges that teachers face and the diverse conditions under which teachers serve the public good, thereby enhancing the image of the teaching profession and the schools in the eyes of the Nation's citizens.

In this coming year, it is our plan to expand the tribute. What has been a special program and thirty ten-minute vignettes on each teacher we anticipate to expand into a gala event, an annual gala event along the lines of the Oscar and the Emmy awards ceremonies. We want to honor the best in elementary and secondary teaching in the way that the entertainment industry honors its best. If we can achieve our goals, if the program will become a national landmark, it can be viewed by millions every year.

If our proposed gala show is entertaining, suspenseful, and exciting, we will be able to attract and hold large audiences to help enforce the idea that teachers light dark places.

Our hope is that these programs will cause young people, as well as adults, to reflect not only upon the accomplishments of these extraordinary teachers and the fact that they are being honored, but also upon the many teachers that they represent. For as H. L. Mencken said, "A teacher is one who, in his youth, admired teachers."

Senator PELL. Thank you very much indeed, Mr. Cooke, for being with us and for your statement.

Your statement will be inserted into the record at this point, without objection.

[The prepared statement of Mr. Cooke follows:]

Prepared Statement of John F. Cooke

I am here to outline Disney's annual national program to honor the American teacher. This program is entitled "The Disney Channel Salutes the American Teacher."

The purpose of the program, which first appeared this past year on The Disney Channel and covered a period of thirty-one weeks, is to foster national recognition and respect for the teaching profession. To this end, the program will select and showcase thirty exemplary elementary and secondary teachers working with classes representing the diversity of America's public and private schools. From the thirty, composed of three teachers each from ten educational disciplines, one teacher will be chosen to symbolize the best in each discipline, and from that ten, one will be selected as the one teacher to represent the idea expressed by Henry Brooks Adams: "A teacher affects eternity; he can never tell where his influence stops."

This program was created and is conducted in collaboration with the Center for Civic Education and with representatives from the nation's leading educational organizations:

- American Association of School Administrators
- American Federation of Teachers
- Council for American Private Education
- Council of Chief State School Officers
- Council of the Great City Schools
- National Association of Elementary School Principals
- National Association of Secondary School Principals
- National Education Association
- National Parent Teachers Association
- National School Boards Association

These organizations help implement this program by having representatives on our Educational Steering Committee, which sets the requirements for application, determines the eligibility of candidates, and, along with the Center for Civic Education, organizes and administers the selection process. Furthermore, this program has received the support and cooperation of various representatives of the federal government.

One might ask what Disney's rationale is for initiating and continuing "The Disney Channel Salutes the American Teacher" program. We unabashedly admit that we are in the entertainment business. We know that audiences are fascinated by heroes - those who are selfless, sacrificing, and giving of their talents and skills. We believe good teachers are heroes and therefore are appealing to audiences when their stories are presented with drama and care.

In addition, we believe that there remain thousands of dedicated, effective teachers whose labors are under-appreciated. Often teachers could excel in enterprises far more lucrative, but their love of teaching and learning keeps them in the classroom, sometimes under adverse conditions. They are the bearers of the standard of the best of American society. Teachers deserve to be more widely known and honored. We feel that as entertainers and communicators we can help provide recognition, praise, and prestige for this profession.

We are attempting to offer a partial remedy for the under-appreciation of teachers. Through the process by which we have chosen to salute these teachers, the entire profession receives a much-warranted honor. The hope is that this tribute will help audiences understand that "...good teachers make good schools" (Reverend Raymond Fullam) and that schools are the guardians of the state.

In "The Disney Channel Salutes the American Teacher," we highlight exceptional elementary and secondary teachers representing their peers: in the different subject fields of the school curriculum; in classes representative of the diverse populations of today's schools; and in each geographic region of the United States.

Also, we expect that this program will inform the audience of the challenges of teaching and the diverse conditions under which teachers serve the public good, thereby enhancing the image of the teaching profession and the school in the eyes of our nation's citizens.

In this coming year, it is our plan to expand the tribute beyond what is now a special program on The Disney Channel and the 30 ten-minute vignettes on each teacher. We anticipate that the presentation in the fall of 1990 will be the first gala annual event (along the lines of the Oscar and Emmy awards ceremonies) to honor the best in elementary and secondary school teaching. If we achieve our goals, this program will become a national landmark event viewed by millions every year on television.

If our proposed gala award show is entertaining, suspenseful, and exciting, we will be able to attract and hold a large national audience to help enforce the idea that teachers light up dark places.

Our hope is that these programs will cause young people, as well as adults, to reflect not only upon the accomplishments of these extraordinary teachers and the fact they are being honored, but also upon all the many teachers whom they represent. For as H. L. Mencken said, "A teacher is one who, in his youth, admired teachers."

Senator PELL. Mrs. Smith.

Mrs. SMITH. Thank you very much.

I am proud to say that I am a classroom teacher and that I am on loan from the Mt. Diablo Unified School District in Concord, California, to direct the Bay Area Writing Project, which is the first site of the National Writing Project. I want to talk about the National Writing Project today.

The National Writing Project is the only national program to tackle the problem that writing in America is an endangered specie. Our goal is to improve student writing and student learning by improving the teaching of writing and the uses of writing to learn in our Nation's classrooms. Each year over 85,000 teachers voluntarily participate in National Writing Project programs, over 600,000 teachers since the project began 17 years ago.

They hear about the project by word of mouth, and what they hear is that in the Writing Project teachers learn to teach writing from another teacher. They hear, too, that the project offers ongoing staff development, and this also makes absolute sense to them. In this day especially, with our rapidly changing student body, a teaching credential should not be a symbol of a teacher's last day of education.

The National Writing Project has a very simple way of helping teachers improve their teaching. There are 143 sites at universities in 44 States, and each site does basically the same thing. First, they find the most gifted teachers of writing in their local areas, kindergarten through university, in all disciplines. They bring those teachers to campus for a five-week summer institute. During the institute these exemplary teachers demonstrate an approach to teaching writing that has been successful with their students. That way every teacher learns from the good practice of every other teacher, and every teacher learns how to give a demonstration to a group of peers.

They also read widely and talk about what they read. They develop new attitudes toward research and what it has to offer them.

The third thing they do is write. In the process they learn how to better help their students as writers. They write for the obvious reason. We would not ask someone to teach us to drive who does not drive. Our students should not be taught to write by someone who does not write, especially since writing is so important and complicated.

After they leave the institute, these teachers go back better prepared to teach their students and also prepared for another crucial job, the job of teaching their fellow teachers how to teach writing. They fan out in their schools and districts to conduct staff development workshops during the school year.

I would like to tell you a bit about my own experience as a teacher in the Writing Project. When I was invited to the project in 1974 I was a junior high school English teacher. The students I had would be called at-risk today; at that time they were called disaffected. One of the things I learned in the Writing Project was that writing can be used to help students learn and think. I began to ask my students to write every day about the literature we were reading, what they understood about it from their own experiences, what they thought of the characters and the way the characters solved their problems, would my students solve their problems in the same way.

For the first time, my students were able to analyze and evaluate and understand in a rich and personally meaningful manner.

A second example: I had my students interview parents, grandparents, neighbors, people in convalescent or retirement homes, about their memories of the Great Depression and then write up these interviews into lively accounts packed with information, so lively, so real that several of my students asked me if I was sure this was the same Great Depression they were studying about in their history classes.

My Writing Project experience taught me how to help my students revise. Imagine how difficult it is for 14-year-olds to completely rethink, reshape and correct something they have written. But if they are taught to, they most certainly can.

Students and teacher are the direct beneficiaries of the National Writing Project. Having a secure source of funding will mean that the Project can go on and that it can expand to serve students and teachers in every region of the country.

The funding we request will be the seed of additional private and State support for the required cost sharing. Right now twelve States give some amount of State funding for their sites.

The National Writing Project is reforming education without waiting for large-scale, expensive reforms. Teachers cannot afford to wait. They do not want to lose the student they have right now. The National Writing Project sees teachers as the center of reform, and what they do to improve their teaching and their students learning is making all the difference in education.

The National Writing Project offers us a national network for the sharing of information, and as such it is less costly, more productive, more efficient than any single isolated effort. Our former program officer at the National Endowment for the Humanities, John Hale, has stated that the National Writing Project "has been by far the most effective and cost-effective project in the history of the Endowment support for elementary and secondary education programs."

Thank you very much.

Senator PELL. Thank you very much indeed, Mrs. Smith, for being here.

Your prepared statement will be inserted into the record at this point, without objection.

[The prepared statement of Mrs. Smith follows:]

United States Senate
Subcommittee on Education, Arts and Humanities

Statement by

Mary Ann Smith
Classroom teacher on loan from
Mt. Diablo Unified School District, Concord, California
to direct the Bay Area Writing Project

March 2, 1990

For the last twenty years, we have all been hearing that American students can't write. In the mid-70's, the crisis in writing was so out of hand that at schools like the University of Michigan and the University of Georgia, remedial writing courses replaced one term of regular freshman English. At the University of California, nearly half of the entering freshmen, students who came from the top 12% of high school graduating classes, were forced to take remedial writing. In this decade, we are told that 75% of the nation's largest corporations offer some kind of basic skills training. Our national assessment of writing skills finds that fewer than 25% of America's high school eleventh graders can write an adequate, persuasive letter and most of those are filled with errors. Writing in America is an endangered species, a skill that could vanish. The lack of writing ability is a key ingredient of our nation's illiteracy problem and a personal tragedy for our 26 million illiterate adults.

Our students need to write more than ever if they are to go on to college and to the demands of the work place. When I say "our students," I mean all our students, including the growing number of immigrant children in this country and the expanding population of students who are now at risk because of their limited proficiency in English.

The National Writing Project is the only national program to tackle America's writing problem. Our goal is to improve student writing and student learning by improving the teaching of writing and the uses of writing to learn in the nation's classrooms.

Each year over 85,000 American teachers participate in National Writing Project programs - over 600,000 teachers since the project began seventeen years ago. They hear about the project by word of mouth, often from the teacher next door who is dominating the conversations in the faculty room with talk about student writing. This is what they hear. They hear that in the writing project, teachers learn how to teach writing from another teacher. This makes sense to them. Most have tried the alternatives: one, teaching writing without any training at all and then abandoning writing altogether or two, being trained by someone from on high, an outside consultant who has never been in the classroom. Teachers share the frustrations of failure and the peculiar void and inexplicable neglect in their University education. They were taught to teach reading but not to teach writing. They know, too, that teachers, like other professionals, should have regular staff development no matter what. In this day especially, with our rapidly changing student body, teachers shouldn't be left to guess at what works. A teaching credential should not be a symbol of a teacher's last day of education.

The National Writing Project has a very simple way of helping teachers improve their teaching. There are 143 sites at universities in 44 states and each site does basically the same thing. First, they find the most gifted writing teachers in their local area, teachers from kindergarten through University from all disciplines. They invite those teachers to campus for a five-week summer institute. During the institute, these exemplary teachers demonstrate an approach to the teaching of writing that has been tested in their own classrooms and proven successful with their particular students. Every teacher, then, learns from the good practice of every other teacher and every teacher learns how to give a demonstration to a group of peers. They also read widely and talk about what they read - articles and books about the teaching of writing - some of them written by teacher researchers and some written by university researchers. They catch up with what is known in the field and with resources that most would not find on their own. They develop a new attitude toward research and what it has to offer them. The third thing they do is write. They write everyday, short pieces, long pieces, the kind of writing they ask their students to do, and in the process, they discover how they might better help their students as writers. They write for the obvious reason. We wouldn't ask someone to teach us to drive who doesn't drive. Our students shouldn't be taught something as complicated and important as writing from someone who doesn't write. By asking teachers to write, we also establish a community of writers and that community transfers later to the teachers' own classrooms.

As excellent as they were to begin with, these teachers leave the summer institute better prepared to teach their students and prepared for another crucial job - the job of teaching their fellow teachers how to teach writing. They fan out in their schools and districts to conduct staff development workshops during the school year. I want to briefly describe those workshops because they, too, make absolute sense to teachers. First, they are always a series of workshops that take place over a year. Too often in the past, staff development has been akin to an inoculation - one shot - with no boosters, no chance for teachers to come back after they've experimented to talk about what happened, to learn the next step. Each workshop is three hours long - long enough for the teachers to actually try out the approach being demonstrated so they are confident that they can try it out with their own students. Finally, the workshops are voluntary. Teachers come because they want to. Once they know they are not going to be tied to their chairs, they come in great numbers, with openness and enthusiasm.

I want to tell you about my own experience as a teacher in the writing project. When I was invited to the very first summer institute in 1974 on the Berkeley campus, I was a junior high school English teacher. The students I had would be called "at risk" today; at that time they were called "disaffected." I was asked to come to the project because I had developed techniques for teaching writing to these students who had street skills but not literacy skills.

One of the things I learned in the writing project was that writing can be used to help students learn and think. I began to ask my students to keep logs while they read the stories and books we were studying together. I asked them to write about what they made of the literature, what they understood about it from their own experience, what they thought of the characters and the ways they solved their problems. Would the students solve these problems in the same way? For the first time, my students came to class eager to talk about what they read and eager to read on. They were able to analyze and evaluate and understand in a rich, personally meaningful manner.

I also learned from other teachers in the writing project to broaden the kinds of writing I was asking students to do. In particular, I learned to take their writing out into the real world. I taught my students how to conduct an interview. In connection with the reading we were doing about the Depression in the 30's, I had them interview grandparents, neighbors, people who lived in retirement or convalescent homes about their memories of the Depression. I did the assignment with them and interviewed my father. Then I taught them to write up their interviews into lively pieces, packed with information about a time in history that is typically remote for students, confined as it is to textbooks and lectures. In fact, their accounts were so lively, so real that several of my students asked me if I was sure this was the same Depression they were studying in their history classes.

My writing project experience taught me how to help my students revise their writing. We're all writers here. We know how difficult it is for us to go back into something we've written and rethink it, reorganize it, [illegible] and correct it. Imagine how hard it is for a 14 year old. But if they are taught to revise, they certainly can. And I found in my experience as a writing project Teacher Consultant giving workshops for other teachers that teachers, too, need help with the revision aspect of teaching writing. It's not something that most teachers just know in their bones how to do.

Students and teachers are the direct beneficiaries of the National Writing Project. Having a secure source of funding for the project will mean that it can go on and that it can expand to serve students and teachers in every region of the country. The funding we request will be the seed of additional private support and state support for the required cost sharing, a minimum of dollar for dollar match. Right now, 12 states provide some amount of state funding for their networks of sites: California, Virginia, West Virginia, North Carolina, Hawaii, Alaska, Kentucky, Connecticut, Nevada, Mississippi, Louisiana, and Pennsylvania.

The National Writing Project has been called the "quiet" project because we are reforming teaching without a lot of hoopla and without waiting for restructuring of schools or reduced class size or any other large scale, expensive reform. We can't afford to wait. Teachers can't afford to wait. They are in classrooms right now, teaching the students they've been given and they don't want to lose these students on the way to seemingly bigger reforms. In fact, teachers are the center of reform and what they do to improve their teaching and their students learning makes all the difference in education.

The National Writing Project is a university/school collaborative model that works. In education where programs come and go, this one has lasted. It's a positive, upbeat program that celebrates good teaching and the results that come from good teaching.

The National Writing Project gives us a national network for the sharing of information - information from both research and exceptional practice. As such, it is less costly, more productive and more efficient than any single or isolated effort. Our former program officer at the National Endowment for the Humanities, John Hale, has stated that the National Writing Project "has been by far the most effective and cost-effective project in the history of the Endowment support for elementary and secondary education programs."

Senator PELL. I would like to ask Governor Oveson this. Do you have any specific suggestions on changes we should make to better meet the needs of your own people in Utah?

Mr. OVESON. We feel that you have been responsive to the local flexibility that I made in my remarks. We feel that that still could be looked at.

We are supportive of the program, but we would ask for the maximum level of local flexibility and control. One issue is the chapter one concentration. In rural Utah there are many rural areas you will not have the large concentration of chapter one funds, but the needs are the same in terms of retention and recruitment of teachers and training of teachers.

So, that would be our major request.

Senator PELL. Thank you.

I would like to ask Commissioner Earhart this, and I am so glad you are down from Rhode Island for this hearing. Is there any mechanism in our New England States under the new regional certification program that links teachers looking for jobs or schools with schools that are looking for teachers? Do we have a means of getting them both together?

Mr. EARHART. There will be, Senator. I mentioned very briefly the clearinghouse that is being established at the Regional Laboratory in Andover, Massachusetts. Now, that clearinghouse will be fully automated and will eventually keep track of openings throughout the region. Also, it will keep track of those who possess the regional certificates and will provide information to teachers looking for positions as well as school districts looking for teachers.

In addition, and I want to take a minute to mention this, there is going to be a software capability, a programming capability that will project the effects of certain policy decisions made, either in a particular State or throughout the region. For example, on the subject of teacher shortages, we are considering in Rhode Island a statewide policy that would limit these numbers of students in the early grades, at least up through grade three, to fifteen per class.

Now, if that becomes a reality, that is going to create a significant need for elementary school teachers in Rhode Island. This software capability in the regional clearinghouse has the ability to predict the impact of policy decisions like that.

We are hoping that because of the capability and with increased utilization of the regional certificate, that we will be able to deal with the shortages that we currently have in some critical areas.

Senator PELL. Is this taking into account the latest State budget that is being put forward by the State authorities in Rhode Island?

Mr. EARHART. In what way, Senator?

Senator PELL. Well, in reducing the number of teachers to fifteen, the student to teacher ratio of fifteen to one.

Mr. EARHART. Well, we do have on the books a block grant program similar to what the lieutenant governor mentioned in Utah. It is not tied to the regulatory process, but it does encourage districts to reduce their class sizes in the early grades.

We also have an earmarked portion of the State financial assistance to local school districts for literacy programs in the early grades. And one of the eligible uses of that money is to reduce class size.

So, we do have some mechanisms in place to try to help districts accomplish that. Clearly, if the fiscal situation does not improve there, it is going to be a problem.

Senator **Pell**. That is correct. I think, just as a matter of record, that if the fiscal situation or the budget is carried out as proposed now, that will not be achieved, that fifteen to one ratio.

Mr. **Earhart**. Not in the foreseeable future.

Senator **Pell**. Right.

Mr. **Earhart**. We are always optimistic, as you know, Senator.

Senator **Pell**. Time changes many things.

I would be very interested, Commissioner Earhart, in your ideas for integrating some of the different subject areas such as history and English or math and science.

Mr. **Earhart**. By the way, I was extremely pleased to see that one of the national academies deals with literacy in substance.

Our literacy program in the early grades, as a matter of fact, requires that the subject areas be integrated, that teachers do incorporate science concepts as they are working on reading and writing, and social studies concepts as well. We want them, and they want to, and we want to help them get away from the notion of teaching 30 minutes of reading and then 30 minutes of science as if the two never meet.

Senator **Pell**. Thank you very much indeed.

I would like to ask Mr. Cooke this. What do you believe can be done to promote other private organizations like yours to take such an interest in the public schools? You are doing a superb job. How can we get other private groups to do the same?

Mr. **Cooke**. I feel, Senator, as you and I talked before, I feel that corporations—and as the lieutenant governor mentioned—corporations really are going to have to play a role here. They are going to have to take an interest. If they do not, then we suffer when we hire people, that they are not as talented and as gifted as they can be; and we do not have the human resources we need.

Our interest is really to stimulate a belief in teaching and education. We employ over 30,000 people in the United States. And it is in our best interests that those people are well educated and trained and have a broad sense of the world.

As you know, we have interests beyond the United States, where we hire Americans abroad. So, it serves our interests, and other companies are going to have to come to that same perspective: that their interests are better served by stepping in early as opposed to waiting till people come knocking on the door for employment.

Senator **Pell**. Thank you very much.

I will now turn to Senator Cochran.

Senator **Cochran**. Thank you, Mr. Chairman.

Let me thank the entire panel for being here today and providing us with the benefit of the testimony that they have given us. I know Senator Hatch was particularly disappointed that he was not able to be here to welcome the governor. He has asked me to request unanimous consent, Mr. Chairman, that his statement be included at the appropriate place in the record of the hearing.

Senator **Pell**. Without objection, it will be inserted into the record.

[The prepared statement of Senator Hatch follows:]

PREPARED STATEMENT OF SENATOR HATCH

Senator HATCH. I welcome the opportunity to discuss the need for quality teachers in the educational system. I am especially pleased that Utah's Lt. Governor Val Oveson is here today. He has long experience in state government, having served as lt. governor for 5 years and as state auditor before that. He is in a unique position to understand the needs of the State of Utah in education and teacher recruitment. I think you will find that his discussion about the concerns of Utah and many other states is a helpful perspective in developing an expanded understanding of the problems that rural areas face in recruiting and retaining qualified teachers.

I hope that our discussion today will center on ways that the Federal Government can work with State and local government as well as the private sector to increase the supply of capable and dedicated teachers who enter our classrooms. Achieving this goal requires Federal leadership without infringing on the rights of State and local entities, which are properly assigned the responsibility of setting local education policies. These entities are accountable to parents and local taxpayers in the first instance, and they should retain control over these basic policies and decisions. Local discretion and flexibility is the strength of this country's diverse and open public education system. This diversity and local control is something which every action at the Federal level should support, not undermine.

I am sure that many of you are aware of the emphasis that my State places on education. The citizens in Utah have one of the highest levels of education in the country. This emphasis on education results in many more of our students going on for higher education than in the nation at large. Our challenge as a State is to encourage many of these students who go on for postsecondary education to enter the field of teaching. I hope that our discussions today and the legislation which will eventually result will help the State of Utah and other states achieve this objective.

Senator COCHRAN. Mr. Chairman, let me call attention to one very important aspect of this testimony that I am particularly interested in. Mrs. Smith is here from the Bay Area, where she is director of the Writing Project there in her area.

I want to thank you, Mr. Chairman and Senator Kassebaum and other members of the subcommittee for joining me in introducing the National Student Writing and Teacher Act. This is a bill that would authorize funding for the National Writing Project that was so eloquently described by Mrs. Smith in her testimony. It is really a network throughout the Nation of teacher training programs affiliated with institutions of higher learning.

The purpose is to improve the quality of teaching of writing and the quality of student writing in the Nation's classrooms. This is a project that has proven that it works. There are 143 sites in 44 States. What the legislation that we have introduced will do would be to add to the programs at these sites and to develop new sites on a dollar for dollar matching basis.

I am glad to report, Mr. Chairman, that we have seen a lot of enthusiastic support here in the Senate for this legislation. As of today, we have 25 senators who have signed on and are cosponsoring this legislation.

I am hoping that, because of what we have learned through the survey done by the Department of Education, about the problem with writing skills today throughout the country, as reflected in the writing report card, and the fact that we do have in place in a lot of our States now a program that is really working to turn this around, that we take advantage of the opportunity that we have this year and include this legislation, this program in the teacher bill that is going to be reported out of our subcommittee.

I am hoping that we will be able to review very carefully the statement that was submitted by Mrs. Smith because it talks about the honors and the recognition that have been received over the past 17 years by the National Writing Project.

Mr. Chairman, I also want to recognize and give credit to others who are here with us today for helping develop this legislation and to help me understand it better. Dr. James Gray is here. He is director of the National Writing Project. Sandra Burkitt is director of the Mississippi Writing and Thinking Institute at Mississippi State University. I would like to introduce them. Would you please stand? Thank you very much for being here.

Senator COCHRAN. Mrs. Smith, let me ask you this. I got a letter from a teacher the other day, and I meant to bring it to the hearing. It is one of the most eloquent comments that I have every received from a teacher about a program. It was describing her personal experience, as you have described it to us today, with this program and the excitement that she has derived from seeing the changes in her classrooms.

Is this unusual, or is this the kind of thing that you have found from others who have participated in this project? Are we just hearing about the extraordinary examples, or is this something that is fairly commonplace in terms of the success of the program?

Mrs. SMITH. It is so commonplace that some teachers describe it as a religious experience, although we really do not like them to describe it that way. But they feel so transformed. There are teachers who may consider dropping out of teaching when they come to the Project, and they are so inspired by their colleagues and about what they learn that they have never thought of doing before, and the reaction of their students when they go back, and the confidence that they have, and the skills they have, that they stay in teaching.

A lot of teachers have told us that they have stayed in teaching because of the Writing Project experience. It is transforming.

Senator COCHRAN. I was impressed with the Senators who were here earlier, Mr. Chairman, as I know you were, in talking about their hopes for improving the skills level in the classroom, not only on the part of the students but the teachers as well in trying to attract, you know, the best students into teaching. What occurs to me is that here is a program that retains the best teachers in the profession, and that is equally important, in my view.

I am convinced that this is a program that has proven its importance as an innovative way to get at a problem that we all agree needs solving. We ought not to wait any longer. Let us expand this program, provide some authority for funding directly from the Federal level to these sites. And I think we will see a tremendous change for the better.

I thank Mrs. Smith for being here and for giving us the benefit of her experiences and knowledge about the program. Thank you, Mr. Chairman.

Senator **Pell**. Thank you very much, Senator Cochran.

Thank you, Governor Oveson, Dr. Earhart, Mr. Cooke, and Mrs. Smith, for being with us today. Thank you very much indeed.

We now come to our third panel. Dr. Margaret Branson is administrator of the Division of Instructional Services in Bakersfield, CA. Mr. Russ Aiuto is director of the Division of Teacher Preparation and Enhancement, National Science Foundation here in Washington. Dr. Jerry Bailey is associate dean, Undergraduate Studies and Teacher Education, School of Education, University of Kansas, in Lawrence, KS. Welcome. Let us start out with Dr. Branson.

STATEMENTS OF DR. MARGARET S. BRANSON, ADMINISTRATOR, DIVISION OF INSTRUCTIONAL SERVICES, OFFICE OF KERN COUNTY SUPERINTENDENT OF SCHOOLS, BAKERSFIELD, CA; RUSS AIUTO, DIRECTOR, DIVISION OF TEACHER PREPARATION AND ENHANCEMENT, NATIONAL SCIENCE FOUNDATION, WASHINGTON, DC; AND JERRY BAILEY, ASSOCIATE DEAN, UNDERGRADUATE STUDIES AND TEACHER EDUCATION, SCHOOL OF EDUCATION, UNIVERSITY OF KANSAS, LAWRENCE, KS

Ms. **Branson**. Thank you very much. I appreciate your invitation to testify today about two important pieces of proposed legislation, S. 1676 and S. 1675.

Your comments and those of the people who preceded us today have made one very important point, and that is that education cannot survive, much less flourish, without excellence in teaching. Teachers are the essential ingredient in quality education, and that is why your concern with the professional training and continuing education of teachers is of such great importance to us.

I believe that both S. 1676 and 1675 provide some answers to the critical questions which are plaguing education today. In the limited time available this morning, I would like to speak primarily to the need for the continuing education or inservice education of teachers.

I would like to draw the committee's attention to four salient points: First, the need for staff development is urgent. A growing body of empirical research documents the shortcomings of inservice education. At present, the inservice education of teachers is infrequent and idiosyncratic. It is lacking in depth; it gives insufficient attention to content or subject matter, and it fails to distinguish between the needs of beginning and experienced teachers.

Second, compared to the expenditures which employers are making for the continuing education of their employees, the taxpayers' investment in the professional development of their teachers can only be described as inadequate.

Third, the essential components of successful inservice training have been identified through numerous research studies. Our challenge is to see that those components are incorporated into appropriate programs for continuing education.

Finally, staff development is a sound investment in the improvement of teaching and learning in the Nation's classrooms. The continuing education of teachers, therefore, should be seen as an instrument of Federal policy to assure and enhance the quality of American education.

Let me expand very briefly on each of those points. First, the inservice of education for teachers as presently offered is inadequate to the needs of both the neophyte and career teachers.

In contrast to certain other occupations, including teaching at the university level, in which full membership in the profession is achieved in well-marked stages, elementary and secondary school teaching has been relatively careerless. Little distinction is made between newcomers and others in the responsibilities they assume and the opportunities and rewards available to them.

The abrupt entry of neophytes into teaching conveys a very false notion that teaching can be mastered in a relatively short period of time by people of good will and sufficient stamina. Researchers who have looked for organized programs of support and assistance to new teachers during their induction period in the United States have been disappointed. Our practices stand in contrast to the more systematic induction activities practiced in Britain, Australia and the Federal Republic of Germany. In the United States, inservice assistance is measured in days and hours instead of weeks and months, despite the fact that over the past 20 years researchers have found that sustained multiyear efforts are required if meaningful results are to improve.

Analysis of the content of recent staff development efforts reveals other inadequacies. Eighty to 90 percent of the inservice activities conducted between 1960 and the present time show that their focus has been on relatively simple teaching acts and behaviors. Insufficient attention has been given to more complex and consequential matters such as the cultivation of a repertoire of effective teaching strategies, curriculum development, evaluation, and course content. The lack of attention to course content is particularly lamentable because studies show that teachers who are assigned often are assigned outside of the areas in which their academic preparation is adequate.

The Senate bills proposed would speak to this inadequacy in content, preparation, and in the matter of seeing that people are kept abreast of new scholarship in their area. It would provide, as the Writing Project has, a series of national academies and congressional district academies which would provide for us a series of people who are qualified to carry out the responsibilities of the service and the future education of their colleagues.

For the reasons that I have just outlined to you, I believe that both of these bills are of great consequence. I have documented in more detail some of the research undergirding the remarks that I have made, and I would appreciate their being incorporated in the record.

Senator Pell. That will, without objection, be done. I thank you for your testimony, Dr. Branson.

[The prepared statement of Ms. Branson follows:]

Testimony Presented to the United States Senate Subcommittee on Education, Arts and Humanities Regarding Senate Bill 1676, the National Teacher Act of 1989 and Senate Bill 1675, the Excellence in Teaching Act

by Dr. Margaret S. Branson, Administrator of the Division
of Instructional Services, Office of the Kern County
Superintendent of Schools, Bakersfield, California

March 2, 1990

Mr. Chairman and Distinguished Members of the Senate Subcommittee on Education, Arts and Humanities, I appreciate your invitation to testify before you about two important pieces of proposed legislation, Senate Bill 1675, the National Teacher Act of 1989 and Senate Bill 1675, the Excellence in Teaching Act. I am Dr. Margaret S. Branson, Administrator of the Division of Instructional Services of the Kern County Superintendent of Schools Office, Bakersfield, California. Our Office serves 48 school districts with an enrollment of more than 143,000 students. The Division of Instructional Services has responsibility for curriculum, staff development, migrant education, substance abuse prevention education, media resources, textbooks and an educational television station.

In the past decade we Americans have seen one report on the status of education follow another. Almost without exception, these reports have decried the inadequacies of our schools. They have pointed to disappointing results of tests of our students' skills in arithmetic, writing, reading and foreign languages and to gaps in our students' knowledge of history, geography, science, mathematics, government, literature, the arts and economics. Almost without exception the reports have called for reform and/or restructuring of the nation's schools. It is interesting to note, however, that not one blue ribbon committee -- not a single critic -- has suggested that education can survive, much less flourish, without excellence in teaching. Teachers are an essential ingredient -- some say THE essential ingredient -- in quality education. That is why your concern with the professional training and the continuing education of teachers is of such great importance. We need to find answers to some critical questions:

1. How do we provide a supply of competent teachers adequate to meet our increasing and changing needs?

2. How can we retain competent, experienced teachers, thereby enhancing the initial and very considerable investment in the teachers of America which the nation's taxpayers already have made?

3. How do we insure the professional growth of our teachers and administrators so that teaching and learning in the nation's classroom will be more effective?

I believe that both Senate Bill 1676, the National Teacher Act of 1989 and Senate Bill 1675, the Excellence in Teaching Act can provide some answers to these questions. In the limited time available for this testimony-I would like to speak primarily to need for the continuing education or inservice needs of teachers. That education and those needs also are referred to as staff development or professional development, so all four of these terms -- continuing education, inservice education, staff and professional development -- will be used interchangeably. All of them are taken to mean any activity that is intended partly or primarily to prepare paid staff members for improved performance in present or future roles in a school district. The term "staff member" is limited in scope to certificated personnel and teachers' aides.

I would like to draw the Committee's attention to four salient points:

1. The need for staff development is urgent. A growing body of empirical research - international, national and state-specific-documents the shortcomings of inservice education. At present, the continuing education of teachers is infrequent, and idiosyncratic. It is lacking in depth; it gives insufficient attention to content or subject matter, and it fails to distinguish between the needs of beginning and experienced teachers.

2. Compared to the expenditures which employers are making for the continuing education of their employees, the taxpayers' investment in the professional development of their teachers can only be described as inadequate.

3. The essential components of successful inservice training have been identified through numerous research studies. Our challenge is to see that those components are incorporated into programs for continuing education.

4. Staff development is a sound investment in the improvement of teaching and learning in the nation's classrooms. The continuing education of teachers, therefore, should be seen as an instrument of federal policy to enhance the quality of American education.

SHORTCOMINGS OF PRESENT DAY INSERVICE EDUCATION

Let me expand briefly on each of those points. First, let us examine the present shortcomings of inservice education.

Inservice education for teachers as presently offered is inadequate to the needs of both neophytes and career teachers. In contrast to certain other occupations, including teaching at the university level, in which full membership in the profession is achieved in well-marked stages, elementary and secondary school teaching, as Judith Lanier of Michigan State University points out, has been relatively "careerless". Little distinction is made between newcomers and others in the responsibilities they assume and the opportunities and rewards available to them. Novice teachers are virtually indistinguishable from their more experienced colleagues. The abrupt entry of neophytes into teaching conveys the false notion that teaching can be mastered in a relatively short time by persons acting independently with good sense and sufficient stamina. That abrupt entry into the profession, coupled with the isolated circumstances under which most teachers work, has resulted in learning alone and learning through trial and error. Such learning is noneducative at best and miseducative at worst. Researchers who have looked for organized programs of support and assistance for new teachers during their induction period in the United States have been disappointed. Our practices stand in contrast to the more systematic induction activities practiced in Britain, Australia and the Federal Republic of Germany. In the United States, organized inservice assistance is measured in days and hours instead of weeks and months, despite the fact that researchers over the past 20 years have found that sustained multi-year efforts are required if meaningful school improvement is to result.

All too often staff development activities are mounted response to needs or fads of the moment. One researcher, M.L. Cogan, has described these cyclical efforts as "Boom and Bust Sequences." He says they "tend to reduce teachers to a cynicism that saps their commitment to professional improvement". What teachers - both novice and veteran - need are _programs_ of appropriate inservice education rather than "quick fixes" or "vaccination" approaches. Their needs cannot be met by an occasional university course nor can they be met by occasional after school meetings covering a variety of topics. Professional growth requires a sustained, carefully planned focus on a few preeminent goals.

Analysis of the content of recent staff development efforts reveals other inadequacies. Eighty to ninety percent of the studies of inservice activities conducted between 1960 and the present time show that their focus has been on relatively simple teaching skills and behaviors such as questioning and giving feedback to students. Insufficient attention has been given to more complex and more consequential matters such as the cultivation of a repertoire of effective teaching strategies, curriculum development, evaluation, and course content. The lack of attention to course content or subject matter _per se_ is lamentable. Studies show that many teachers are assigned classes for which their academic preparation is inadequate. Even those whose initial command of subject matter is commendable need to be brought abreast of new knowledge and recent scholarship, particularly teachers of the natural, physical and social sciences.

Another inadequacy in staff development stems from our own view of it. Should continuing education for teachers be seen as a compulsory duty or a right? Should the decision about whether or not to participate in inservice activities rest, as it usually does now, with the teacher alone? The National Staff Development Council reports that 40 of the 50 states, the District of Columbia, and American Samoa now require some kind of professional development for some teachers. Requirements vary from state to state, and none are very specific or rigorous. Teachers' decisions are idiosyncratic; they depend upon the individual's personal convenience, financial resources and professional circumstances. Choices about what course of professional development to pursue, how much to pursue and even whether to pursue any at all remain matters of personal prerogative. Descriptive inventories of teachers' professional growth activities illustrate dramatic differences among teachers of comparable experience and teaching assignments. One researcher (Arends, 1983) reported that a beginning high school biology teacher, who was described as an avid learner/participant, logged over 1600 hours in additional course work, independent research, selected conferences and workshops over a three year period. Another biology teacher logged only 29 hours of continuing education in the same three-year period.

PUBLIC V. PRIVATE EXPENDITURES FOR CONTINUING EDUCATION

Thus far we have looked at the shortcomings of staff development from a school and teacher vantage point. But, there is another measure of adequacy and that is expenditure. How does the public expenditure for inservice education compare to that of private industry? A Wall Street Journal special report on education for February 9, 1990 puts the annual public and private spending on all elementary and secondary education at 189 billion dollars. The annual spending by employers on formal and informal training of employees is 210 billion dollars. In other words, not only are employers currently outspending our elementary and secondary schools by more than 20 billion dollars a year, their expenditures are exclusively for the continuing education of their employees. On any given day, International Business Machines (IBM) is training 22,000 of its employees somewhere in the world. That amounts to more than 7 million student days a year, the equivalent of a major university schedule. The annual cost of this training to IBM is 1.5 billion dollars, not counting the participants' time. IBM is not alone in its efforts to upgrade the competence of its workers. Seventy percent of the Fortune 500 companies surveyed by the Wall Street Journal said they planned to spend more on education and training of their employees this year, because rapid changes have "upskilled" most job categories. As Paul A. Henn, manager of academic and technical training at Chrysler Corporation put it, "You either stay up with the competition or become inundated. It's not a matter of choice but of survival".

There are no firm figures, in fact, there are not even any reliable estimates of how much money is expended on the continuing education of teachers in the United States. We do have some California figures, however, and they help us realize what a relatively small portion of taxpayers dollars go into the continuing education of teachers and administrators.

In 1988, the State of California released results of a year-long study of staff development. That policy study was a joint project of the Far West Laboratory for Education Research and Development and PACE, Policy Analysis for California Education. The results of that study not only are instructive, but they speak to concerns addressed in both Senate Bill 1675 and Senate Bill 1676.

California's experience with staff development is of interest because of the size of the state's school system and because of the diversity of its student bodies. Categorical staff development programs for California's teachers and administrators consume approximately 2 percent of the total educational funding in a one-year period or approximately 35 million dollars. Public monies go first to support the salaries of district specialists who plan and lead staff development activities and second to pay for substitute teachers who take responsibilities for classrooms when regular teaches are away. At the local level, costs in 1987 amounted to about $16.51 per hour of staff development.

The larger California taxpayer investment in staff development, however, stems from salary advances that teachers accrue as a result of salary credits awarded by districts to teachers who pursue advanced university coursework or who engage in staff development activities for which salary credit is granted. When future salary increments are taken into account, the investment slightly exceeds 4 percent of total educational funding in California. That now amounts to about one billion dollars yearly. It should be remembered, however, that school districts generally do not award salary credit if staff development takes place during regular school hours and/or if the costs are borne by the school district.

The state, however, is not the only or even the prime contributor to continuing education. The contribution which teachers and administrators make to improving their own knowledge and practice is noteworthy. Their commitment is significant. The California study which has just been cited revealed that for every dollar spent by districts and schools directly on formal staff development activities individual teachers contributed 60 cents in volunteer time with no present or future compensation. Why are these teachers and administrators willing to make this personal commitment despite the absence of clear incentives or rewards for participation? They say that "access to new ideas" is their number one motivation. They also say that they want and need more, not less, staff development.

COMPONENTS OF SUCCESSFUL INSERVICE TRAINING

Detailed discussion of the essential components of successful inservice training programs is beyond the scope of this brief commentary. It is important to point out, however, that although we do not know enough about effective inservice and effective school improvement, we can be guided by what has been learned from both international and American studies.

Between 1975 and 1981 the Organization for Economic Cooperation and Development (OECD) through its Centre for Educational Research and Innovation (CERI) conducted an on-going program of research into the inservice education and training of teachers. Ten national monographs were produced as a result.

These national case studies have not been as widely disseminated as they should be, but the Final Report written by Ray Bolam of the University of Bristol is instructive. The Report warns that "Desirable as speedy and inexpensive changes undoubtedly are from a political and economic viewpoint, they are not likely to be easily attained and strategies for change which assume otherwise are not likely to prove cost effective in the long-run". Research in all of the nations involved on both adult learning and school improvement point to a common difficulty - that of achieving sustained and continuing change. The evidence from studies of innovations for individuals, groups and organizations is that they all require extremely careful planning, appropriate resources and a well thought-through implementation strategy over a lengthy period of time. National educational policies, the Report advises, should foster more content-specific approaches to inservice education, theory should be based upon an analysis of practice, and the continuing education needs of both beginning teachers and those at the other end of the experience scale should be met. "Every teacher must see himself and be seen as a career-long student....The internal dynamism of the teaching profession must be maintained by all possible means."

A National Study of Outstanding Staff Development Programs in the 50 states of the United States conducted in 1984 confirmed the widely held view that staff improvement and leadership renewal can have significant positive impact on teaching and administrative skills and, subsequently, on student achievement. That study found that "Effective staff development programs were composed of a framework of parts operating in unison:

- a comprehensive assessment of needs,
- staff input for planning,

- participation of personnel in conducting activities,
- delivery systems compatible with adult learning theories,
- support and reinforcement of teachers following staff development activities, and
- evaluation of programs and teacher competencies following implementation."

University coursework was seen as very important by only one-third of those surveyed in the National Study which included Chief State School Officers, superintendents, principals and teachers. Even though almost half of the respondents said that university courses still were utilized for staff development purposes, they did not feel that traditional university classes met their needs. Their observations comport with findings from other studies which show that where information-only training is used - and that is the case in most university classes - the average effect on knowledge acquisition is modest, about .7. But when presentations, demonstrations and opportunities for practice and feedback are combined, the effect on measures of knowledge averages about 3.00.

Another nation-wide study, a meta-analysis of nearly 200 research studies and a review of the literature on staff development, was completed in 1987. It also is helpful in identifying the attributes of successful inservice programs. Among the more important findings of that study were these:

- Almost all teachers can take useful information back to their classrooms when training includes four parts: (1) presentation of theory, (2) demonstration of the new strategy, (3) initial practice in the workshop, and (4) prompt feedback about their efforts.

- Teachers are likely to keep and use new strategies and concepts if they receive coaching (either expert or peer) while they are trying the new ideas in their classrooms.
- Competent teachers with high self-esteem usually benefit more from training than their less competent, less confident colleagues.
- Individual teaching styles and value orientations do not often affect teachers' abilities to learn from staff development.
- Initial enthusiasm for training is reassuring to the organizers but has relatively little influence upon learning.
- The effects of training do not depend on whether teachers organize and direct the program, although social cohesion and shared understandings do facilitate teachers' willingness to try out new ideas.

THE VALUE OF NATIONAL AND CONGRESSIONAL DISTRICT ACADEMIES

The Federal Government does indeed have a leadership role to play in the area of teacher training and the continuing education of teachers. A public commitment by this Congress to the support of teachers and teacher training through the establishment of a series of targeted but critical initiatives would constitute an important step toward the strengthening of the profession and the effectiveness of teaching/learning in the nation's classrooms.

Titles V and VI of Senate Bill 1676 offer opportunities to do just that by establishing National and Congressional District teacher academies in each of the subject areas commonly taught in elementary and secondary schools:

- mathematics
- English, reading and language arts
- civics and government
- basic skills and literacy instruction
- the arts including art, music and the performing arts
- history and geography
- economics
- life sciences
- physical sciences
- foreign languages

In the National Academies teachers would spend the bulk of their time (70 percent) studying basic course content relevant to the particular subject field under the tutelage of the most accomplished and prominent scholars in those fields. The remainder of the time (30 percent) is to be devoted to methods of instruction which research has demonstrated to be most efficacious and to the planning of inservice training programs to be conducted by the Congressional District Academies which would be established under Title VI. The National Academies are to operate for a period of five years and they are renewable. That time frame allows for the kind of continuity and sustained effort that is needed, if significant numbers of teachers are to be trained and significant impact is to be realized.

Another noteworthy provision of this legislation is that it is designed to train leadership teams who, in turn, will provide inservice training for teachers in the Congressional District Academies. The result will be the establishment of a national leadership network of individuals prepared to assist in the designing and implementation of exemplary teacher education throughout the nation.

These National and Congressional District Academies will address some of the important problems which now plague the teaching profession and which have been described earlier in this testimony. The Academies will provide a means for teachers to strengthen their own knowledge base and to be brought abreast of new scholarship in the subjects which they teach. The Academies will capitalize on the most recent applied research findings concerning education and the classroom by acquainting large numbers of teacher leaders with that research and by showing them how to use it. The Academies will offer a viable, sustained, systematic plan for continuing education as opposed to present fragmented, infrequent, and unfocused efforts. Finally, the National and Congressional District Academies would provide a means of utilizing the talents and sharing the expertise of America's most talented and successful teachers.

Because there is an urgent need to protect the very considerable investment which the nation's taxpayers already have made in the preparation and training of teachers, and

Because there is a need to enhance the knowledge and skills of the nation's teachers, and

Because we know from both international and national studies that more knowledgeable and effective teachers mean more effective learning on the part of students.

I urge you to act on Senate Bills 1676 and 1675.

Senator PELL. Now we turn to Mr. Aiuto.

Mr. AIUTO. Mr. Chairman, I am pleased to have this opportunity to describe to the committee the program activities of the National Science Foundation that address a number of the issues for the improvement of subject matter competence of teachers.

My specific role at NSF is to administer the Division of Teacher Preparation and Enhancement. This division has four primary program areas. If you will permit me, I will briefly describe them for you in order to construct a context within which the largest of the programs, teacher enhancement, and its relevance to your deliberations can be considered.

In addition to this oral presentation, I appended our five-year strategic plan for your reference.

The smallest of the division's programs in terms of funding is the program entitled Presidential Awards for Excellence in Science and Mathematics Teaching. As you can well appreciate, its visibility and its importance to the overall effort to improve science and mathematics education is considerable. For the past 6 years, two teachers, one in science and one in mathematics, at the secondary level from each State and the District of Columbia, Puerto Rico, the State Department Schools, and the Department of Defense Dependents Schools have been recognized with a $7,500 grant, a week of idea sharing and education in Washington, and a great deal of recognition by his or her home State.

This year, 1990, awards for elementary school teachers will be added.

One cannot help but mention that a previous awardee is now the Chief State School Officer for the State of Arizona. Most heartening of all of this is that the vast majority of presidential awardees have been participants in NSF-supported Teacher Enhancement projects at some time during their career.

The second program that I would like to describe briefly is the program of Teacher Preparation. This activity involves grants to institutions of higher learning that have teacher education programs for the preparation of teachers of science and mathematics. Currently, NSF supports 41 teacher preparation projects at colleges and universities in 24 States.

The importance of this effort can be recognized by the following data:

While two-thirds of teachers at the elementary level feel qualified to teach mathematics, less than a quarter of them feel qualified to teach science.

I might add that 94 percent of elementary teachers teaching at the K through 3 level are white females.

This confidence notwithstanding, a second point to note, is that the typical elementary teacher has had one, a single, course in college-level mathematics.

And finally, over half of the teachers of either mathematics or science, at all levels of K through 12 education, feel unprepared to use computers as instructional tools.

These data and other similar findings are relevant to inservice programs as well. You are doubtless familiar with much of this research, so I will not go into further detail at this time.

A third activity of the Division of Teacher Preparation and Enhancement is the Science and Mathematics Education Networks Program. This program supports a variety of activities, including such projects as teacher science educator scientist conferences, electronic and computer networks linking together those involved in science and mathematics education, and teacher enhancement projects that involve partnerships between school districts, engineers, scientists and mathematicians from the private sector. This latter activity involves some 50 projects across the Nation and utilizes the intellectual resources represented by scientists and engineers who practice their profession in industry and government.

About two-thirds of all professional scientists in the United States are in the private sector, not in universities and colleges.

The largest program in my division of NSF, and the one that has many of the objectives in the proposed legislation, is the NSF program in Teacher Enhancement. Many of you, I am sure, are aware of the success of the Teacher Institutes supported by NSF in the 1960s and 1970s. As a matter of record, I am an alumnus of one of those programs of 30 years ago. Our present effort in providing inservice support for teachers is somewhat different than those years in that Teacher Enhancement programs of the past 6 years or so have built-in followup components, so that the experience, usually in the summer, is enhanced further by academic year workshops, classroom visits, and so on. During the summer of 1989, NSF supported 260 college and university sites at which some 12,000 teachers were participants.

Characteristics of these Teacher Enhancement projects were that they usually consisted of 20 to 40 teachers; these grants are usually three-year projects, so that over the lifetime of a grant, 60 to 120 teachers can be served; typically they are three to 5 weeks in duration, with three to five academic-year followup meetings; they are content centered, concerned with hands-on activities; teachers, principals and supervisors participate in the planning, along with the scientists and mathematicians from the universities who are the primary instructional staff; the average funding from NSF is about $150,000 a year, with an average cost sharing by the university of approximately 30 percent; and we do provide stipends for the teacher-participants: $60 per day, or $300 per week.

As significant and as successful as these Teacher Enhancement programs are, it is important to note that our efforts of improving the subject matter competence of 12,000 teachers each summer represents only a small portion of the teachers in the United States who have some responsibility for science and mathematics teaching.

In fiscal year 1989 the Division of Teacher Preparation and Enhancement effort was $63.6 million; in fiscal year 1990, $81 million; and our request for fiscal year 1991 is $89.6 million. So, progress is being made.

It is my belief, in summing up what I have to say to you, that the success of the programs under my direction can be attributed to three very important factors.

One, NSF is an organization engaged in the activities of the scientific community, with research scientists, and as such avoids the unfortunate condition of contributing to two cultures: those who practice science and those who teach and learn science. They must be a single culture. Our position is that the process of science is discovery, and that it is essential to have scientists and mathematicians involved in education.

Second, NSF programs are competitive. They are based on merit. They depend on the judgments of peers. Therefore, we make every effort to encourage the very best projects for inservice opportunities for teachers.

Three, the success of NSF programs has been due in large part to the flexibility provided by Congress in the authorizing legislation for our programs, in which NSF has been able to implement the goals of Congress by designing and administering broad programs that meet national needs.

We certainly welcome increased efforts by Congress in this very critical area of improving the ability of the Nation's teachers to provide the very best instruction, and we will continue as a Federal agency to provide exemplary inservice programs, relying on NSF's distinctive strengths.

Thank you, Mr. Chairman.

Senator Pell. Thank you very much indeed.

Without objection, your written statement will be inserted into the record.

[The prepared statement of Mr. Aiuto with an attachment follow:]

Statement of Russell Aiuto
National Science Foundation

March 2, 1990

Mr. Chairman, I am pleased to have this opportunity to describe to this Committee program activities of the National Science Foundation (NSF) that address a number of the issues for the improvement of subject-matter competence of teachers.

My specific role at NSF is to administer the Division of Teacher Preparation and Enhancement. This Division has four primary program areas, and , if you will permit me, I will describe them briefly for the Committee, in order to construct a context within which the largest of the programs, Teacher Enhancement, and its relevance to your deliberations, can be considered.

In addition to this oral presentation, I am appending the National Science Foundation's Strategic Plan for FY' 1990 - FY' 1994, that describe the Division's proposed goals and activities. I hope that these detailed statements will be helpful, and I draw your attention in particular to pages 13 to 17.

The smallest of the Division's programs in terms of funding is the program entitled PRESIDENTIAL AWARDS FOR EXCELLENCE IN SCIENCE AND MATHEMATICS TEACHING. As you can well appreciate, its visibility and its importance to the overall effort to improve science and mathematics education is considerable. For the past six years, two teachers (one in science and one in mathematics) at the secondary level from each state, the District of Columbia, Puerto Rico, the State Department Schools, and the Department of Defense Dependents Schools have been recognized with a $7,500 grant, a week of idea-sharing and education in Washington, and a considerable amount of recognition by his or her home state. This year, 1990, awards for elementary school teachers will be added. By the end of October, 1990, some eight hundred individuals will have been recognized for their outstanding teaching, and many will serve as mentors for colleagues, on NSF review panels, and as leaders in curriculum reforms being carried out by various national organizations, such as the American Association for the Advancement of Science, The National Science Teachers Association, and the National Council of Teachers of Mathematics. One cannot help but mention that a previous Awardee is now the Chief State School Officer for the State of Arizona. Most heartening of all is that the vast majority of Presidential Awardees have been participants in NSF-supported Teacher Enhancement projects.

The second program that I would like to describe briefly is the program in TEACHER PREPARATION. This activity involves grants to institutions of higher learning that have teacher education programs for the preparation of teachers of science and mathematics. Currently, NSF supports 41 teacher preparation projects at colleges and universities in 24 states. The primary focus is the revision of the science and/or mathematics components of the curricula for these pre-service teachers. A number of these grants have been for elementary and middle school teacher preparation programs. The importance of this effort can be recognized by the following data:

- o While two-thirds of elementary teachers feel qualified to teach mathematics, less than a quarter feel qualified to teach science;
- o This confidence notwithstanding, the typical elementary teacher has had one --- a single --- college-level mathematics course;
- o Over half of all teachers of either mathematics or science --- at all levels of K through 12 education --- feel unprepared to use computers as instructional tools.

These data, and other similar findings, are relevant to in-service programs as well. You are doubtlessly familiar with such research, so I won't go into further detail at this time.

A third activity of the Division of Teacher Preparation and Enhancement is the SCIENCE AND MATHEMATICS EDUCATION NETWORKS PROGRAM. This program supports a variety of activities, including such projects as teacher science educator scientist conferences, electronic and computer networks linking together those involved in science and mathematics education, and teacher enhancement projects that involve partnerships between school districts, universities or other educational institutions, and scientists, engineers, and mathematicians from the private sector. This latter activity, involving some fifty projects throughout the nation, utilizes the intellectual resources represented by scientists and engineers who practice their profession in industry and government.

The largest program in my division of NSF, and the one that has many of the objectives in proposed legislation in Congress is the NSF program in TEACHER ENHANCEMENT. Many of you, I am sure, are aware of the success of the "Teacher Institutes" supported by NSF in the 1960's and 1970's. As a matter of record, I am an alumnus of one of those programs of thirty years ago. Our present effort in providing in-service support for teachers is somewhat different, in that Teacher Enhancement programs of the past six years or so have built-in follow-up components, so that the experience, usually in the summer, is enhanced further by academic workshops, classroom visits, and so on. During the summer of 1989, NSF supported 260 college and university sites at which some 12,000 teachers were participants. Characteristics of these Teacher Enhancement projects are as follows.

- They are usually three-year grants, serving 20 to 40 teachers per year;
- Typically, they are three to five weeks in duration, with three to five academic-year follow-up meetings;
- They are content-centered, concerned with hands-on activities;
- Teachers, principals, and supervisors participate in the planning, along with the scientists and mathematicians from the universities who the primary instructional staff;
- The average funding from NSF is about $150,000 per year, with an average cost-sharing by the university of about 30%;
- Stipends are provided to the teacher-participants: $60 per day, or $300 per week.

As significant and successful as these Teacher Enhancement programs are, it is important to note that our efforts of improving the subject matter competence of 12,000 teachers each summer represents only a portion of the teachers in the United States who have some responsibility for science and mathematics teaching. In FY' 1989, the Division of Teacher Preparation and Enhancement effort was $63.6 million; in FY' 1990, $81,0 million; and our request for FY' 1991 is $89.6 million, so we are making progress.

It is my belief that the success of programs under my direction can be attributed to three very important factors:

- NSF is an organization engaged in the activities of the scientific community, with research scientists, and as such avoids the unfortunate condition of contributing to two cultures: those who practice science and those who teach and learn science. Our position is that the process of science is discovery, and that it is essential to have scientists and mathematicians involved in education;

- NSF programs are competitive; they are based on merit; they depend on the judgments of peers. Thus, we make every effort to encourage the very best projects;
- The success of NSF programs has been due, in large part, to the flexibility provided by Congress in the authorizing legislation for our programs, in which NSF has been able to implement the goals of Congress by designing and administering broad programs that meet national needs.

We certainly welcome increased efforts by the federal government in this very critical area of improving the ability of the nation's teachers to provide the very best instruction, and we will continue to provide exemplary in-service programs, relying on NSF's distinctive strengths.

ENHANCING THE QUALITY
OF
SCIENCE, MATHEMATICS, AND ENGINEERING EDUCATION
IN
THE UNITED STATES

STRATEGIC PLAN FOR FY1990 - FY1994

NATIONAL SCIENCE FOUNDATION

Preface

This document comprises the National Science Foundation's "five-year strategic plan for science and engineering education," required (20 U.S.C. §3917) "to be up-dated on an annual basis, and submitted to the Committee on Labor and Human Resources of the Senate, and the Committee on Science and Technology of the House of Representatives by November 30 of each year."

The sections of this Plan pertaining to elementary and secondary education, and with education at the graduate level and beyond, deal exclusively with programs of the Directorate for Science and Engineering Education (SEE). The section on undergraduate education provides descriptive information for SEE's programs at that level and for those elements of the Foundation's educational activities that are distributed over the several research directorates but coordinated by SEE.

Public Law 98-371 required that the Foundation fund, from the FY1985 appropriation for SEE, "a contract to develop a science education plan and management structure for the Foundation." That mandate was carried out through the award of two contracts. Research Triangle Institute studied middle school science education programs; its report (RTI/3460-01FR) issued in December 1986. SRI International covered all precollege science and mathematics education, kindergarten through grade 12; its report (SRI Project No. 1809 under NSF Contract No. SPA-8651540) was issued in two parts in May 1987 and April 1988. This Plan embodies major findings and recommendations of both these seminal studies.

The Office of Technology Assessment of the Congress published, in June 1988, an advisory report entitled "Educating Scientists and Engineers, Grade School to Grad School," (OTA-SET-377). The findings and recommendations in that OTA report also are reflected in this Plan.

INTRODUCTION

A Strategic Plan is, by design, a plan for the long range. This document sets forth the goals and objectives of National Science Foundation education programming. But, ahead of those goals and objectives lies a vision of a state of science, engineering, mathematics, and technology education in the United States -- a state that, when achieved, will serve individual as well as national needs. The premise of this Plan is that such education involves a chain of links from pre-school, through K-12, to undergraduate and graduate study. All the links must be strong. The educational process must be designed to stimulate the interest of all students -- indeed, of all citizens -- so as to ensure that the nation will have the scientists and engineers it needs in the years ahead and the scientifically literate citizenry that our democracy will require as we enter the 21st Century.

1. ROLE OF THE NATIONAL SCIENCE FOUNDATION IN EDUCATION

In the National Science Foundation Act of 1950 (42 U.S.C. Sec. 1862, as amended) Congress authorizes and directs the Foundation "to initiate and support . . . science education programs at all levels in the mathematical, physical, medical, biological, social, and other sciences . . . and engineering education programs at all levels in the various fields of engineering."

The National Science Foundation has the background, capability and mandate to provide vigorous leadership and strong support to the nation's efforts to strengthen its science, mathematics, and engineering education at every level.

Overall, the goals of NSF's education activities are to stimulate and lead nationwide efforts that will strengthen and accelerate the transmission, adaptation, and utilization of knowledge from the engineering, mathematical, and scientific disciplines; that will attract talented youth to careers in those fields and prepare them for sustained creative endeavor; and that will provide to students of every age, whether or not of scientific turn of mind, such background in the disciplines as will sustain their understanding and use of mathematics and science. Those goals encompass all levels of education and all stages of human resources development.

An Education Agenda for NSF

The President and the nation's Governors (September, 1989) have issued "a Jeffersonian compact" to develop national education goals, forge strong federal-state partnerships, and commit the partners to more effective deployment of resources through significant steps to restructure education in all states. The NSF's education agenda for FY1990-FY1994 mirrors that compact and translates its broad provisions into focused actions to strengthen education in science, mathematics and engineering.

The National Science Foundation will:

- Support the development of innovative and rigorous programs of instruction in science and mathematics to ensure that every child can acquire the knowledge and skills required for effective participation in today's technologically-oriented society;
- Expand programming that will improve the quality of education in mathematics, engineering, and the sciences for all students;
- Stimulate and support educational activities that will enhance the scientific, mathematical and technological literacy of the population; and
- Encourage and support the development of the Nation's scientific and technological human resources -- so that there is a full and steady stream of highly educated scientists, mathematicians, and engineers to participate in the Nation's research and production activities.

Strategic efforts will be aimed at:

- Expanding excellence in science, mathematics, and engineering instruction at all levels, and supporting the acceptance of higher expectations of student and institutional performance;
- Stimulating nationwide an increase in the amount of "hands-on" science available to students at every level, but especially in the elementary schools;
- Developing attractive and effective new courses and curricula that provide consistent and coherent mathematics and science alternatives for consideration by those who administer education programs;
- Broadening the impact, accelerating the pace, and increasing the effectiveness of improvements in science, mathematics, technology and engineering education;
- Increasing the effectiveness of teachers, faculty members, and supervisors -- in part by extending the application, adoption, and use of new educational technologies; in part by improving the professional environment;
- Expanding active, sustained parental and business community involvement;
- Developing means to increase the numbers of female, minority, and disabled students who study science and mathematics at all levels, and to increase their interest in scientific and technical careers;

- Expanding the familiarity of both youth and adults with science, mathematics, and technology through formal and informal contact; and
- Increasing the number of research scientists who give attention and effort to the improvement of science, engineering, and mathematics education.

NSF's Strategy for Change

The National Science Foundation at all times must have an education agenda and its leadership of educational improvement and reform must be proactive.

SRI International completed in 1987 a Congressionally-mandated study of alternatives available to the Foundation in the planning and management of its educational mission at the elementary and secondary levels. In the SRI report, "Opportunities for Strategic Investment in K-12 Science Education," NSF's present education programming was portrayed in terms of two contrasting strategies, with the note that the best strategy for the Foundation might be some combination of the two:

- An incremental improvement strategy -- which emphasizes stimulating and supporting a variety of incremental changes in educational systems (e.g. relatively short-term ventures to improve course materials, provide inservice retraining to teachers, and share the costs of new instructional instrumentation); and
- A fundamental change strategy -- which seeks to support changes that can improve education basically and in the long term (e.g. exploration of advanced technologies; research in the processes of teaching and learning; reform of preservice teacher education; and statewide changes in education-related policy and programs).

Since 1987, this Strategic Plan has been based on the conclusion that the National Science Foundation should employ a composite strategy in its education programming -- addressing simultaneously short-term objectives and long-term goals. A composite strategy can yield incremental changes to benefit persons already in the formal education stream while fundamental changes are devised for the benefit of all students -- present and future. Incremental changes may also serve usefully as experimental steps toward the design of more widespread fundamental changes.

Another Aspect of NSF's Strategy

For too long, the nation has deferred necessary improvement of its educational systems; it has neglected the continuing efforts required to improve curricula; it has failed to install the best technology and keep it up to date; it has not been willing to assure the continuing education and confidence of the educators themselves; and it has in other ways failed to meet the ever-changing requirements of a varied and vigorous population. The results are to be seen in technical graduates fewer and less well educated than necessary; a citizenry poorly literate in science and technology; and economic competitiveness lagging that of the leader nations.

The National Science Foundation will continue to provide leadership in addressing this complex predicament in science, mathematics, engineering, and technology education. In working to "solve the problems" of education, NSF will seek out the very best people to be engaged; help them to make their best efforts; and assist the implementation of their findings. NSF will be flexible in the face of changing conditions, continuing the attack as the greatest need shifts from one area to another. The National Science Foundation's strategy in fulfilling its educational mission will be one of continuous investment -- and the Foundation will work with other Federal agencies and with the States to stimulate and coordinate their programs of continuous investment to improve the quality and effectiveness of education nationwide. NSF will expand and strengthen its collaborations with the Department of Education and the Department of Energy.

The education programming of the Foundation will identify strategic areas of the educational system that require change, and support experimentation, generate change, and assist implementation.

2. THE DIRECTORATE FOR SCIENCE AND ENGINEERING EDUCATION

The Directorate for Science and Engineering Education (SEE) is the primary focus for education programming within the National Science Foundation, and is funded by Congress through a separate appropriation. Additional activities that impact education are conducted by each of the research directorates. SEE discharges many of the Foundation's education leadership and support responsibilities through programs dealing formally and informally with teachers, students, materials, and methods.

SEE's Divisions of Teacher Preparation and Enhancement and of Materials Development, Research, and Informal Science Education are responsible for activities at the elementary and secondary school levels. Programs of the Division of Undergraduate Science, Engineering, and Mathematics Education deal with undergraduate education in universities and in two-year and four-year colleges; the Division coordinates the education activities supported by the research directorates and manages undergraduate education programs of its own. SEE's Division of Research Career Development manages programs at the graduate and postdoctoral levels, as well as programs designed to reach science-interested students in middle and high schools. The Office of Studies and Program Assessment serves all units engaged in educational programming by supporting data collection, and analytic and evaluative studies of science, mathematics, technology, and engineering education at all levels.

NSF education programs have supported many projects designed to improve the quality and effectiveness of instruction in mathematics, engineering and the sciences. Capable educators have been helped to sharpen their professional skills, and individuals of high potential have been attracted to teaching in these fields. Materials development projects have provided exemplary tools and techniques that, after being adapted to local conditions, have been adopted widely in this country and abroad; and Foundation-sponsored research has led to deeper understanding of the processes of teaching and learning. In all of these areas, the involvement of the National Science Foundation has become a hallmark of excellence that attracts private sector and local public support.

This Strategic Plan details the activities of the National Science Foundation that are sited in or coordinated and managed by the Directorate for Science and Engineering Education. At each level, efforts focus on points of strategic entry where NSF can help develop long-term national capabilities. The strategy is designed to mobilize the skills of scientists and educators at all levels, taking advantage of the Foundation's unique access to the science research and education communities. As appropriate, NSF coordinates its activities with the Department of Education and with other Federal agencies having education functions.

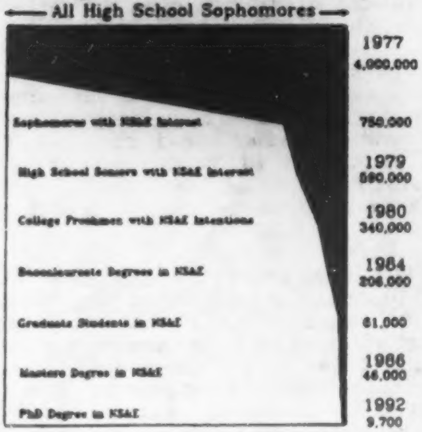
3. GOALS OF THE DIRECTORATE FOR SCIENCE AND ENGINEERING EDUCATION

The pervasiveness of science and mathematics in contemporary life and society are all the justification needed for concern about the accessibility, quality, and effectiveness of education in these fields. Science is central to today's civilization and mathematics is central to science; they afford us an expanding understanding of nature and the forces that affect our lives. Our intellectual capabilities are enriched by the quantitative thinking and problem solving that characterize mathematics and the sciences. Scientific experimentation and thinking contribute to rational thought, dispel ignorance, eradicate superstition, and build the foundations of knowledge.

Less abstractly, there is a substantial and growing need for well educated scientists, mathematicians, engineers and technologists to do the technical work of society. There is increasing need for sophisticated science literacy in the American work force as a whole. And, the proper and informed exercise of contemporary democratic citizenship is becoming increasingly dependent on the basic science literacy of all the people.

The educational dimensions of these needs are indic figure below. The "High School and Beyond" Surveys [U.S. of Education; 1980, 1982] show that by their sophomore hi year, fewer than 20 American youth are in any kind of career science or engineeri years later, fewer tha will have baccalaure in those fields, and, more years 0.24 percer doctorates. The nat being demands that centages be increase forts to that end ar tant NSF mission. B be a national disas comprehension of scie mathematics literacy called "numeracy") c majority of our peo receive less attenti for these reasons National Science Foun twin mission with education -- a missic lence to the persons by both the shaded a portions of the figur

Persistence of NS&E Interest
from High School through PhD Degree



The Directorate for Science and Engineering Educat major long-range goals. Each of these goals gives rise of objectives for the Directorate's education activiti turn, each of the Directorate's programs addresses one these goals through subsets of those objectives.

GOAL I: To help ensure that a high-quality education i available to every child in the United States to enable those who are interested and talent technical careers at all levels, especially in engineering, as well as to provide a base standing by all citizens.

The National Science Foundation plays a critica role in elementary and secondary education. The prob diverse and their scope and complexity too great to effective solutions will emerge spontaneously from u local or state activities.

At the elementary and secondary school levels, NSF be targeted on:

The educational dimensions of these needs are indicated in the figure below. The "High School and Beyond" Surveys [U.S. Department of Education; 1980, 1982] show that by their sophomore high school year, fewer than 20 percent of American youth are interested in any kind of career in natural science or engineering. Seven years later, fewer than 5 percent will have baccalaureate degrees in those fields, and, after eight more years 0.24 percent will have doctorates. The national well-being demands that these percentages be increased, and efforts to that end are an important NSF mission. But it would be a national disaster if the comprehension of science and the mathematics literacy (sometimes called "numeracy") of the vast majority of our people were to receive less attention. It is for these reasons that the National Science Foundation has a twin mission with regard to education -- a mission of excellence to the persons represented by both the shaded and unshaded portions of the figure.

The Directorate for Science and Engineering Education has five major long-range goals. Each of these goals gives rise to a number of objectives for the Directorate's education activities; and, in turn, each of the Directorate's programs addresses one or more of these goals through subsets of those objectives.

GOAL I: To help ensure that a high-quality education in science is available to every child in the United States, sufficient to enable those who are interested and talented to pursue technical careers at all levels, especially in science and engineering, as well as to provide a base for understanding by all citizens.

The National Science Foundation plays a critical leadership role in elementary and secondary education. The problems are too diverse and their scope and complexity too great to expect that effective solutions will emerge spontaneously from uncoordinated local or state activities.

At the elementary and secondary school levels, NSF support will be targeted on:

- enhancing the subject-matter competence of present and future teachers;
- conducting research on the processes of teaching and learning; developing indicators of student and teacher achievement, and better test instruments; and acquiring reliable information on educational trends and progress nationwide and in other industrialized nations;
- developing classroom materials that: reflect the state of scientific knowledge and its applications; are grounded in the best research on teaching and learning; will support the creation of several new, consistent, and coherent patterns of early science and mathematics education; and are well adapted to the differing needs of major segments of the student population;
- increasing the effectiveness and breadth of applications of advanced technologies to science and mathematics education; and
- implementing new research-based science and mathematics curricula in major school systems, and extending and networking the dissemination and exchange of information about successful curricula and instructional techniques.

GOAL II: To help ensure that the educational pipelines carrying students to careers in science, mathematics, and engineering yield sufficient numbers of well-educated individuals to meet the technological needs of the U. S. work force.

The Foundation's programming for the scientists, mathematicians, and engineers of tomorrow -- those who will emerge from the disciplinary pipelines -- begins with pre-school informal science education activities, continues "from grade school to grad school", and extends through advanced postdoctoral studies.

To help increase the number of students who are attracted to careers in technical fields, the Directorate's programming will emphasize:

- developing, through support of activities ranging from television programs to traveling museum exhibits, a variety of non-school opportunities for young people to "see and do science";
- encouraging and supporting the development of new educational methods, materials, and experiences that will retain and sustain the enthusiasm for science and mathematics shown by most elementary school students;

- enhancing educational programs that stimulate the interest of women, minorities, and disabled persons in preparing for careers in science, mathematics, and engineering;

- expanding the opportunities for talented secondary school students and undergraduates to be involved directly in research and in other science-enriched environments;

GOAL III: To help ensure that those who select scientific and engineering careers have available the best possible professional education in their discipline.

SEE will concentrate on the teachers, subject matter content, and classroom materials that are part of the teaching and learning processes at every level. Other NSF Directorates will continue to emphasize research as a tool for educating the next generation of scientists, mathematicians, and engineers.

The National Science Foundation's direct programming for the scientists, mathematicians, and engineers of tomorrow -- those in the disciplinary pipelines -- begins in the secondary schools, continues through the undergraduate and graduate years, and extends through advanced postdoctoral study to support of the pre-tenure research activities of young college and university faculty members.

The undergraduate and research career development activities of NSF during the period FY1990-FY1994 will be targeted on:

- providing modern equipment for undergraduate science and engineering instruction, especially as part of laboratory development efforts;

- stimulating continuous upgrading of science, mathematics and engineering curricula (especially projects that apply new instructional technologies, employ the results of learning research, and emphasize emerging or interdisciplinary fields and articulation with secondary schools);

- supporting a variety of instructor-oriented programs to update disciplinary knowledge, sharpen instructional skills, and build confidence in teaching new curricula;

- encouraging comprehensive intra-institutional and consortial efforts to improve undergraduate instruction;

- supporting programs of data collection, analysis, and dissemination to assist science, mathematics, and engineering education planning at all levels;

- providing direct support for the best graduate students in science, mathematics, and engineering; and attracting top young investigators into academic faculty careers.

GOAL IV: To help ensure that opportunities are available at the college level for interested nonspecialists to broaden their science backgrounds.

The great majority of students need a special kind of technical perspective and understanding to give them sophisticated insights into and acquaintance with the principles, practices, applications and limits of science.

Study of mathematics and the sciences is required in many curricula that prepare students for nontechnical, non-science careers. More often than not, students in these curricula take the same courses as do mathematics and science majors. An even greater fraction of college students -- those whose courses of study do not include mathematics, science, or technology -- have little opportunity to expand the knowledge they gained in school-based contact with these fields.

All college students should be able to take courses that provide sophisticated acquaintance with the principles, practices, and techniques of science, insights into its scope and limitations, and similar familiarity with mathematics and technology.

During the period covered by this Strategic Plan, FY1990-FY1994, the Foundation will initiate activities targeted on:

- developing new mathematics, science, and technology course offerings that will provide effective instruction to nonspecialists;
- supporting and disseminating such new instructional materials and model courses; and,
- encouraging and supporting the development of new instructional approaches and materials to overcome the science and mathematics aversion of nonspecialist undergraduate students.

GOAL V: To support informal science education programs to maintain public interest in, and awareness of, scientific and technological developments.

Much useful learning about science, mathematics, and technology is accomplished informally by both children and adults. Indeed, most adults will have only informal contact with these critical areas after they leave school or college. The Foundation is committed to efforts to assure a balanced and rich environment that encourages informal science learning across a broad range of interests, age, and sophistication. These efforts will utilize print and broadcast media, museums, zoos, aquaria, science clubs and hobby groups. They will be designed to stimulate and maintain self-confident interest in science, mathematics, and technology in their large target population.

The informal science education activities of NSF during the period FY1990-FY1994 will be targeted on:

- developing, through radio, television, museums, and science clubs, a rich and motivating environment for informal science learning; and
- bringing science museum and other community-based services to previously unserved audiences; and extending the reach and impact, and improving the quality and cost-effectiveness of all programming.

STRATEGIES AND PROGRAMS FOR THE FUTURE

The Directorate for Science and Engineering Education (SEE) is involved in the education activities of the National Science Foundation over the whole span of formal education (kindergarten through postdoctorate) and in many areas of informal education as well.

The mix of programming proposed in the Budget Request evolves over time from this Strategic Plan. In turn, the character of this Strategic Plan is influenced by many sources of thought, comment, statement, and fact, e.g.: the results of SEE-supported studies of science, mathematics, and engineering education; demographic projections; recommendations published in analyses and reports by various public and private bodies; statements by the President and other leaders; and the planning activities of Foundation staff members.

This Strategic Plan is based on a careful selection from the continuing stream of recommendations being made with regard to science, mathematics, and engineering education. In addition, it reflects some of the significant general recommendations made recently about education in the United States.

As the balance of NSF's education strategy shifts from support for incremental improvement toward stimulation of fundamental change, three principal programmatic strands will be employed to maintain unity and continuity within our K-16 activities.

1. **MATHEMATICS.** Mathematics cuts across all levels of education and all disciplines, technical and non-technical. The study of mathematics is essential for all students K-16, not just for those who may go on to major in the field as undergraduates.

   The recently published "Standards" (from the National Council of Teachers of Mathematics) and "MS2000" (the long-range mathematics curriculum project of the Committee on the Mathematical Sciences in the Year 2000) include examples of objectives that will be supported strongly by the Foundation through existing and new programs. Possession of quantitative skills is so critical to student maintenance of career options that SEE will require that there be a mathematics dimension in all its instruction-oriented programs -- from Instructional Materials Development to Teacher Preparation to Young Scholars.

2. **GOOD HEALTH.** The indices of "good health" in the United States are among the poorest in fully developed nations. For some decades its schools have not taught much about the science that underlies good health. "Turning Points," the 1989 report sponsored by the Carnegie Council for Adolescent Development makes the case that better health and better learning depend on and serve each other.

We can build excellent science and mathematics education programs on topics such as advances in the nutritional sciences (which are not yet in the curriculum, or in service), and human biology and individual development. The Foundation will encourage the inclusion of an appropriate mathematics and science-based "good health dimension" in projects intended to reach students or teachers, K-16.

3. **THE ENVIRONMENT.** The issues presented by the environment offer multiple and integrated ways to teach science and mathematics. A specific focus on the ecology of the planet provides opportunities to introduce principles of chemistry, biology, physics, earth science, and engineering. The Foundation will encourage the inclusion of an appropriate environmental/ecological dimension in the curriculum-related projects it supports.

Additionally during the period FY1990 - FY1994, the Foundation's education programs at all levels will reflect the following special concerns:

A. For the preparation of instructors -- NSF will expand preservice and inservice programs for college and university faculty members as well as for teachers in the schools.

B. For non-instructor educators -- the Foundation will work to strengthen the participation of, e.g., counselors, principals, governing board members and civic leaders in efforts to improve and extend science and mathematics education.

C. For improved delivery systems -- NSF will emphasize the effective and widespread use of advanced technologies in future education delivery systems -- uses in which instructors enslave the technology, not the technology the instructors.

D. For the teaching-learning environment -- the Foundation will emphasize "hands-on science" at every level; questions-will-be-answered approaches to instruction; and greater interaction between formal instruction and informal science education activities.

E. For widespread implementation of effective methods -- NSF will work at every level of organization but especially with the States to accelerate the adoption and utilization of excellent new curriculum materials and instructional methods for science and mathematics education.

In the following sections, NSF's Strategic Plan for science and engineering education is described by educational level in terms that reflect SEE's internal organization.

I. ELEMENTARY AND SECONDARY SCHOOL LEVELS

SEE's Programs at the elementary and secondary school levels are concentrated in the Division of Teacher Preparation and Enhancement; the Division of Materials Development, Research, and Informal Science Education; and the Office of Studies and Program Assessment. One program at this level, the Young Scholars Program, is administered in the Division of Research Career Development.

TEACHER PREPARATION AND ENHANCEMENT

The Division of Teacher Preparation and Enhancement (DTPE) comprises the following Programs at the level of elementary and secondary schools: Teacher Enhancement (for active teachers), Teacher Preparation (for those preparing to enter the profession), Science and Mathematics Education Networks (among active teachers), and Presidential Awards for Excellence in Science and Mathematics Teaching.

A. Program Activities

1. Teacher Enhancement

The Teacher Enhancement Program will provide support for model projects for inservice improvement of the qualifications and effectiveness of mathematics and science teachers.

In addition to expanding its program of general teacher enhancement activities, the Teacher Enhancement Program will:

- Invite proposals for projects that focus the attention of teachers at the elementary and middle school levels on techniques for increasing classroom effectiveness through the use of advanced educational technology;
- Support projects that concentrate on one or more of the special programmatic strands -- Mathematics, Good Health, and The Environment.
- Seek proposals for programs, involving middle and secondary school teachers, that explore techniques for attracting minority, female, and disabled students to the study of science, mathematics, and technology;
- Stimulate relationships between scientists working in the private sector and school, college, and university projects that improve precollege science and mathematics education; and
- Emphasize projects that will develop sound ways to improve the capability of secondary school teachers to teach combinations of related subjects (e.g., chemistry and earth sciences,

physics and mathematics, or chemistry and physics). Other projects will address other problems of small schools.

To assure the widest possible utilization of the products of the Nation's investment in teacher enhancement activities, the Program will support continuing evaluation of its completed teacher enhancement projects, expansion of mechanisms for disseminating information about them, and acceleration of implementation.

2. Teacher Preparation

The Teacher Preparation Program will provide support for innovative projects in the preservice education of future teachers of mathematics and science that address expert-identified shortfalls in the content of teacher education and the intense problems in the profession that will arise because of current demographic trends.

In addition to maintaining its program of support for the development of innovative and effective curricula to prepare teachers to be truly expert in mathematics or individual science fields, the Teacher Preparation Program will:

- Invest in model programs for preparing secondary school physical science teachers to be competent in more than one discipline;
- Seek projects that will develop interdisciplinary and multidisciplinary college science offerings for the preparation of elementary and secondary school teachers;
- Support model projects designed to: (1) strengthen and sustain the interest that minority, female, and disabled students have in science, mathematics, and technology when in elementary and middle school, and attract these students to further study of these subjects in high school; (2) bring more rapidly into existing curricula the results of research on the processes of teaching and learning; and (3) use advanced technologies to increase teacher effectiveness.

3. Science and Mathematics Education Networks

The Science and Mathematics Education Networks Program supports groups organized at any level (local, regional, state, national) to share information, resources, and/or talent in service of a general or specific educational objective -- often, the improvement of some aspect of the delivery of educational service. The Foundation is especially interested in fostering use of the intellectual capital of business and industry and other private sector entities to address needs in K-12 education in partnership with large urban schools, school districts, regional consortia, and whole states (and with other educational and professional entities, as appropriate).

In addition to funding meritorious unsolicited proposals received from the field, the Networks Program will start up in FY1990 cooperative "Statewide Initiatives" to "make happen" the systemic, comprehensive changes necessary for major improvement of the teaching and learning of science and mathematics in the United States at all educational levels. Special emphasis will be placed on teacher preparation and enhancement and on informal science education activities.

The "Statewide Initiatives" will constitute a vigorous response to an October 1988 statement of the National Science Board that "NSF should visibly and forcefully join in national efforts to introduce broad systemic reforms in elementary and secondary education -- particularly, but not solely, as regards math and science."

Many studies now available criticize the current situation of education and provide recommendations for its betterment. Hundreds of projects are exploring every aspect of the present educational predicaments and are beginning to yield answers to questions and solutions to problems.

The Statewide Initiatives will take the necessary next step by working with several states to plan, design, and take action that only the states can take to bring about major educational change. These statewide projects will be comprehensive; they will make use statewide of the results that are beginning to come from educational improvement experiments. NSF support will be planned to last up to 5 years, depending on the action timetable for each state.

Each Statewide Initiatives project will address a family of objectives in a concerted, coordinated way -- through a partnership of executive, legislative, educational, business, and public leaders. Such a family of objectives might include:

o Adoption of more effective science and mathematics curricula and use of better instructional and testing materials;

o Application at the classroom level of new, powerful educational technologies;

o Reform of the state's attendance policies and support mechanisms to lower student dropout and raise student achievement;

o Increased involvement of parents in educational decision-making and support;

o Adoption of better methods and new standards for the preparation and certification of teachers, and for the conditions of their employment;

The participation of NSF in these partnerships is critical to the improvements needed in mathematics and science instruction; other partners will work with NSF and State leadership to assure that all areas of instruction are benefited and enhanced.

In addition to supporting Statewide Initiatives and a program of meritorious unsolicited proposals, the Networks Program will:

- Invite projects designed for consensus building, coordination and collaboration, or the exchange of ideas related to future directions for the improvement of mathematics, science, and engineering education;
- Issue further solicitations for support of Private Sector Partnerships (PSP), extending the series begun in FY1987;
- Support several projects designed to disseminate exemplary models, instructional materials, assessment information and research findings -- especially the output of successful projects supported by the Foundation; and
- Organize conferences to explore ways and means by which research scientists can be attracted to participate in school-focused activities to improve science and mathematics education -- especially by bringing to it their expertise in Mathematics, Good Health, and The Environment.

[The Career Access Opportunities in Science and Technology for Women, Minorities, and the Disabled (CAO) Program includes projects with substantial components at the elementary and secondary school levels. See section II.B.5, below, p. 28.]

4. Presidential Awards in Science and Mathematics Teaching

This program is designed to demonstrate the importance of good teaching by explicitly recognizing and rewarding each year the excellence achieved by some science and mathematics teachers. The Presidential Awards honor the teachers selected in gratifying and highly visible ways. Each awardee is provided with modest resources for future use, and the interactions of the Awards Week result in immediate and continuing sharing of ideas that extends well beyond each teacher's personal professional environment.

During the period FY1990 - FY1994:

- The Presidential Awards program will make awards to over five hundred elementary school teachers of science and mathematics in addition to the similar awards to secondary school teachers;
- Efforts will be made to extend and strengthen the interactions of the Presidential Awardees with their colleague teachers.

B. Impact in FY1994

By FY1994:

- Teacher Enhancement projects will reach directly several thousand leader teachers each year -- and each of them will assist the improvement of the qualifications of 5 to 50 additional teachers each year.
- Teacher Preparation projects (each involving one or more colleges and universities, and about half engaging a school district as well) will be accomplishing a variety of research and demonstration objectives in teacher preparation; some of the projects in each area will be supporting evaluation, dissemination, and implementation activities.
- Projects of the Networks Program, especially those under the States Initiative, will have broad and diverse impacts on the nationwide effort to raise and maintain the quality of science and mathematics education in its schools; its large Private Sector Partnerships component will engage many industrial and business firms in such projects.
- There will be almost 1800 Presidential Award winners. Each one will have continuing direct influence on several other teachers and beneficial indirect influence on many more.

MATERIALS DEVELOPMENT, RESEARCH, AND INFORMAL SCIENCE EDUCATION

The Division of Materials Development, Research, and Informal Science Education (MDRISE) comprises the following Programs: Instructional Materials Development, Applications of Advanced Technologies, Research in Teaching and Learning, and Informal Science Education.

A. Program Activities

1. Instructional Materials Development Program (IMD)

The great need for better curriculum and instructional materials is widely recognized; but, actual utilization of new products is the last in a long series of steps that includes, usually, conceptualization, authoring, trial use, correction, publication, promotion, dissemination, marketing, evaluation, adoption, selection, distribution, familiarization, and implementation. Detailed information generally is lacking on the numerous constituencies whose roles and interactions affect the ultimate outcome of use.

The approach employed currently by the National Science Foundation in the curriculum development area is to support experimentation, improvement, and change; to emphasize excellence in content and pedagogy; and to address practical concerns such as instructional effectiveness for all students, utility to contemporary teachers in real-world school settings, and effective marketing and implementation to achieve widespread impact. The current strategy exploits a greatly sharpened focus on impact; the use of formative evaluation in all projects; and a pattern of consistent and focused impact assessment.

During the period FY1990 - FY1994, the highest priority of the Program will to be the development of model curricula in mathematics and science that promote the mathematics and science literacy of students at all grade levels, and build a sound background for disciplinary learning in both high school and college. The special programmatic strands (Mathematics, Good Health; The Environment) will be woven into the fabric of these curricula, which will deal with all three basic elements of literacy: knowledge, intellectual skills, and attitudes or dispositions. Particular emphases will be placed on: impacting female, minority, and disabled students; introducing science early; preventing science/math aversion; using scientific and pedagogical research results; and catalyzing adoption of excellent new curriculum materials.

o Through a series of solicitations in science and in mathematics, the Foundation will invite proposals for comprehensive, integrated curriculum projects spanning the elementary, middle, and high school years; the focus will be shifted gradually from the elementary toward the secondary schools.

o A vigorous program of support for materials development will include generation of single- and multi-discipline course materials and teacher support materials for science and mathematics instruction at all grade levels.

o Projects will be sought to develop alternative, more comprehensive, and more demanding K-12 mathematics curricula, with instruction directed toward quantitative skills and insights that contribute to a problem-solving orientation.

The Foundation will continue to press for a combination of private publisher and public investment in major projects, and substantial academic participation to assure quality of content and pedagogy. NSF also will undertake widespread coordination with state and local planners and school systems to assure responsiveness to their needs and, later, a receptive environment.

2. Applications of Advanced Technologies (AAT)

The Applications of Advanced Technologies Program is responsible for supporting research, development, and demonstration in the use of state-of-the art computer and telecommunications technologies in science, mathematics, and engineering education. The Program seeks projects that will lay the research and conceptual foundation for technologies that will be available in five to ten years; highest priority is placed on developments promising order-of-magnitude increases in efficiency and breadth of application.

- The Program will continue its coordinated research efforts on "intelligent tutors" and knowledge-based systems, with special emphasis on proof-of-concept experiments with intelligent tutors in calculus, algebra, pre-algebra, and algorithmic problem solving. The combination of artificial intelligence, cognitive science, and advanced technology hold the promise of providing a significant advance in student performance.

- The Program will support programming projects to develop powerful new computational tools and symbol manipulation systems for problem solving; these new tools and systems are expected to enhance the capacity of all students to cope with problems of steadily increasing complexity.

3. Research in Teaching and Learning

Expansion of basic knowledge about the processes of teaching and learning mathematics, technology, and the sciences, and about the factors that affect success in these fields, is the responsibility primarily of the Research in Teaching and Learning Program (RTL) in the Directorate for Science and Engineering Education.

Recent research suggests that the ways students learn are discipline-specific. Thus, both the teaching of topical material and of learning strategies must reflect the nature of the subject matter before the student. Research also suggests that the early development of cognitive competence follows a sequence of steps that is largely culture-independent.

During the period FY1990 - FY1994, the Program will:

- Support research on teaching and learning in specific knowledge domains (chemistry, physics, mathematics, biology, computer science, etc.) at both the school and college levels, placing strong emphasis on establishing the content and sequence of learning that can be most effective in developing science and mathematics literacy and problem-solving skills.

- Seek research projects on the effects and significance of the nature and quality of laboratory experiences at all levels.

- Invite proposals for projects to explore factors that may influence: student interest, participation, and achievement in science and mathematics; development of motivation and curiosity; and the making of curricular and career choices (and persistence in them) -- at various student ages and educational levels, and with special emphasis on factors that influence underrepresented groups in their choices of courses of study.

To the extent that teaching is something beyond creating and maintaining an environment for student learning, a critical factor in determining what the student will learn is what the teacher knows and believes.

- Proposals will be invited for projects that will: (1) address the content and teaching of the curriculum for students as influenced by the preservice preparation of teachers; and (2) carry out the conceptual/analytical work needed to define the content of professional competence examinations as they relate to science and mathematics teaching at the middle and high school levels, the corresponding development of the test instruments, and the research needed to validate them.

4. Informal Science Education Program (ISE)

The Informal Science Education Program utilizes broadcasting, museums, science clubs and other community-centered activities to assure a balanced and rich environment that encourages informal learning across a broad range. All aspects of the ISE program are designed to stimulate and maintain self-confident interest in science, mathematics, and technology.

- NSF/ISE's broadcasting projects will emphasize audience extension and will seek to improve the quality and variety of established television programs and series; special attention will be given to mathematics, good health, and the environment as program foci. ISE will support projects that: consolidate and extend the impact of core program series; maintain a continued but modest flow of new materials; explore the potential use and impact of new formats and media; develop alternative formats; and encourage formation of linkages to museums and science clubs.

- ISE's support of science museums will encourage cooperation and the exchange of resources. The Program will invite proposals for projects that develop new strategies to: bring museum services to persons resident outside major population centers; extend audiences and services through cooperative development, multiple copies, and traveling exhibits; and broaden the role of museums as centers for clubs, hobbies and community interest in science. ISE will endeavor to widen the participant spectrum by placing increasing emphasis on zoos, natural history museums, and aquaria, and by encouraging the involvement of newer and smaller museums in its programs.

- ISE's programming in the community activities area will increase support for clubs, groups, and organizations seeking to expand and improve the science content of recreational learning for young people. Special efforts will be made to: strengthen after-school activities targeted on the 6-14 age group; support projects that focus on those who are underrepresented in science and technology (women, minorities, and disabled); experiment with family-centered science learning; provide advanced science enrichment for "high interest" children; and explore new ways of identifying, supporting, and developing talent.

- The Informal Science Education Program will explore a variety of new and emerging alternatives to present delivery methods; for example: tradebooks and other home learning resources, home and library videotapes, and home or school-based adult education projects.

5. Curriculum Utilization

NSF is developing plans to establish a curriculum utilization program that will combine the outcomes of the Materials Development and Advanced Technologies programs in substantial two-year implementation projects sited in school systems of various sizes.

- Proposals will be invited first from large minority-dominant systems, each project comprising a sequence of activities such as curriculum examination and evaluation, curriculum improvement, and application of new materials to teacher enhancement. In the second or third year, proposals will be invited from small and medium-sized school systems.

B. Impact in FY1994

By FY1994:

- Materials Development and Applications of Advanced Technologies demonstration projects will involve each year hundreds of teachers and tens of thousands of students. The demonstration projects, if successful, will assure that tens of thousands of teachers and millions of students are reached each year by the varied products of these Foundation-sponsored activities.

- The results of Research in Teaching and Learning Program projects will guide the development of new curricula and may affect the ways in which science and mathematics are taught to all students.

- Projects of the Informal Science Education Program will continue to reach millions of persons annually at modest cost.

STUDIES AND PROGRAM ASSESSMENT

Continuous efforts are required to guide educational program development in the Foundation. Within the Directorate for Science and Engineering Education, the Office of Studies and Program Assessment is responsible for information acquisition and support of related policy studies. The Office collaborates in these efforts with other NSF units and with the U. S. Departments of Education and Labor, other Federal and state agencies, private foundations, and colleges and universities as appropriate.

A. Program Activities

1. Studies and Analyses Program

The Studies and Analysis Program is responsible for the collection and analysis of data on science and engineering education issues, the support of related policy studies, and policy development.

The Program is currently sponsoring several research projects to develop "indicators" of the status of science and mathematics education. An indicator is a statistic that conveys a general impression of the nature of the system being examined, e.g., the percentage of high school graduates who have taken a year-long course in physics (20% in 1987), or the percentage of middle school mathematics teachers meeting certain (here those of the National Council of Teachers of Mathematics) recommended course-taking standards (only 10%). State, national, and international assessments of student achievement in mathematics, science and computer science also are being supported.

During the period FY1990 - FY1994, the Program will:

- Improve the validity of the indicators of student achievement, student learning behaviors (e.g., enrollment in science courses), teaching quality, curriculum quality, and financial and leadership support for science education, and assess the extent to which an indicator monitoring system can produce useful information for policy makers.
- Improve science and mathematics assessment procedures so that valid state, national and international studies will be implemented, and ensure that timely assessments will be conducted.
- Direct effort toward understanding the reasons for the relatively poor performance of U.S. students on international assessments, and support analyses of the results of the first state-by-state assessment in science and mathematics (to be implemented in 1990 by the National Center for Education Statistics).
- Support data gathering, trend analyses, and policy studies in several areas strongly related to nationwide education improvement efforts: supply and training of scientists, mathematicians, and engineers; teacher training, qualification, supply, and demand; content of instruction; state, urban, and rural educational reform movements; development of testing

procedures to measure higher-order thinking skills; and undergraduate engineering, science, and mathematics education.

2. Program Assessment

Program assessment studies are designed to provide information to schools, colleges and universities, and governments at all levels to help in planning efforts, and to assist the Foundation in improving its own education activities.

In the next five years, this component of the Program will:

- Place emphasis on identifying characteristics of high leverage programs and assessing the impact of specific NSF education activities or programs;
- Direct efforts toward improvement of the process of program evaluation in science, mathematics, and engineering education;
- Assist states and local school districts to develop procedures for effective student and teacher assessment;
- Invite proposals to establish one or two Centers for Evaluation and Dissemination of information derived from NSF-funded education programs; and
- Conduct intergovernmental networks and conferences to assist in policy development and coordination, and to share information among states and other sectors.

B. Impact in FY1994

Projects supported by the Studies and Analyses Program and its Assessment Studies component are designed to acquire information and assist the development of policy to guide action. Their impact, though necessarily indirect, is potentially relevant to all technical education and its contributions to National well-being.

YOUNG SCHOLARS PROGRAM

The Young Scholars Program for talented secondary school students (initiated in FY1988 and administered by the Division of Research Career Development) focuses directly on students (especially members of underrepresented groups), stimulating their interest in mathematics, science, and engineering, and helping them maintain options. Over 4500 young men and women participate annually in Young Scholars projects.

During the period FY1990 - FY1994, the Young Scholars Program will be expanded moderately. The impact of the program should be seen in greater persistence by its participants in their preparation for careers in science and engineering.

II. UNDERGRADUATE PROGRAMS

NSF's undergraduate program is an agency-wide effort involving the Directorate for Science and Engineering Education (SEE) and the Foundation's research directorates. Instruction-related programs are concentrated in SEE, research-related programs in the research directorates. The Division of Undergraduate Science, Engineering, and Mathematics Education (USEME) within SEE serves as the focal point for undergraduate activities. USEME is responsible for:

- Managing undergraduate program activities budgeted within the SEE Directorate;
- Coordinating the NSF mission in undergraduate education across the Foundation; and
- Stimulating the involvement of academic scientists, their institutions, States, the private sector, and other Federal agencies in efforts to improve undergraduate education in mathematics, engineering, and the sciences.

Charged to administer some programs and to coordinate and manage others, USEME's task, broadly, is to bring the resources of _all_ of the NSF Directorates effectively to bear on improving undergraduate education in all fields of concern to the Foundation. Policy guidance for the Division is provided by a committee composed of the Assistant Directors of SEE, STIA, MPS, GEO, ENG, CISE, and BBS, convened by the Senior Science Adviser.

Many kinds of institutions provide undergraduate education: two-year and community colleges, four-year colleges, and comprehensive and research universities. The NSF strategic plan for undergraduate education addresses the critical needs found in all kinds of colleges and universities, consistent with the recommendations of the National Science Board's Report -- "Undergraduate Science, Mathematics, and Engineering Education," (NSB 86-100). The plan comprises two major elements:

A. _Leadership Activities_ to stimulate interest in and active support of undergraduate education by other sectors, i.e., scientists, academic institutions, the States, the private sector, and other Federal agencies; and

B. _Leveraged Program Support_ to provide incentives for improvement, encourage high standards, generate models of excellence, and leverage local and State resources.

A. Leadership Activities

Among the leadership activities to be pursued during the period FY1990 - FY1994 are these:

- Preparing short- and long-range program plans for NSF support of undergraduate science, mathematics, and engineering education -- in consultation with the other NSF Directorates, professional groups, the academic communities, and persons from the private sector;

- Expanding participation of undergraduate students and teaching faculty in research;

- Developing programs to attract senior research faculty to activities that will improve lower division undergraduate instruction;

- Encouraging cooperation and sharing of resources among colleges and universities to help control the costs of undergraduate instruction; and

- Supporting networks among the States and local higher education decision makers to disseminate information, share ideas, and develop cooperative strategies to improve the health of higher education in the sciences.

- Conducting workshops and conferences on issues important to the character, quality, and effectiveness of undergraduate education -- e.g. undergraduate science education in institutions of different types; the curriculum and articulation; and dissemination of innovations from the source institution to other campuses.

Workshops and conferences on undergraduate education, conducted by USEME in conjunction with NSF's research directorates, are productive elements of the long-range program planning process. The participants are distinguished academic and industrial scientists, engineers, and administrators.

The first three workshops, in 1986, dealt with broad issues in Mathematics, Engineering, and the Sciences, respectively, and yielded important counsel in regard to the recommendations contained in the NSB Undergraduate Education Report (NSB 86-100). A 1988 set of workshops focused on specific disciplines -- Biology, Chemistry, Computer Science, Engineering, the Geosciences, Mathematics, and Physics; and a special workshop concentrating entirely on the Nation's two-year and community colleges was held in October 1988. The findings and recommendations of those workshops were collected in a single report (NSF 89-3).

These workshops enabled the Foundation: to obtain a better understanding of the present condition of undergraduate education; to identify targets and predicaments of the highest priority; and to receive specific recommendations for programmatic action from the national disciplinary communities. The plans for leveraged program activities that follow are based in significant measure on the advice and counsel from the 1986 and 1988 workshops.

B. Leveraged Program Activities

During the period FY1990 - FY1994, The National Science Foundation will expand or develop undergraduate programs in the following areas of critical concern: (1) Instrumentation and laboratory improvement; (2) Faculty-oriented programs; (3) Materials, curricula and technologies; (4) Institutional development; (5) Career access improvement; (6) Engineering education coalitions; (7) Research for undergraduate students; and (8) Planning and evaluation.

1. Instrumentation and Laboratory Improvement

NSF's program for undergraduate instructional instrumentation and laboratory improvement is designed to discover and implement new approaches to improve the effectiveness and efficiency of laboratory instruction, especially through use of modern instrumentation.

- A substantial effort will be mounted to generate more effective and efficient approaches to laboratory instruction; the improvement of large-enrollment introductory laboratories is a special target. This effort comprises the College Science Instrumentation Program (CSIP) in SEE and Doctoral Universities Instrumentation (DUI) in the research directorates [but in SEE beginning with FY1991]. This activity will strongly involve the research community, and will continue, as appropriate, the present requirement of CSIP for substantial cost sharing. Projects in two broad categories will be supported:

  Instrumentation: Model and standard setting projects to improve laboratory instruction through creative use of modern instrumentation and advanced technologies; and

  Laboratory Improvement: The conception, design, and testing of new approaches that are cost effective, powerfully stimulative of learning, and that reflect actual science and engineering practice.

2. Faculty-Oriented Programs

There is demonstrated need for opportunities and stimuli to assure that the nation's two- and four-year college and university teaching faculties remain vigorous and current in their disciplines. The Foundation's faculty-oriented undergraduate activities will stimulate new ways (and share in the support of the best traditional ways) to improve the qualifications of college and university faculty through continuing education or research activities.

- NSF will mount new programs such as: a teacher-scholar program to recognize and stimulate outstanding undergraduate teaching;

support for experienced faculty to pursue advanced studies, instructional development projects, or/and research; matching grants to accomplished scientists, mathematicians, and engineers to devote time to improving teaching (special emphasis will be given to introductory courses, and an industrial funds challenge will be included); and a program to foster improved interaction between research scientists and college-level instructors by supporting workshops, seminars, educational projects, etc., for faculty at all levels.

3. Materials, Curricula, and Technologies

There is need for a variety of projects, large and small, to stimulate faculty efforts that will yield new undergraduate courses and curricula. In this area, the Foundation will emphasize: involvement of research-oriented faculty; timely applications of new knowledge and technologies; re-thinking professional and preprofessional curricula; courses for nonscientists; and the critical articulations -- high school with college, and two-year institutions with four-year.

During FY1990-FY1994, in partnership with the research directorates, SEE will develop activities such as:

- Support for major curriculum development efforts (like those initiated in FY1988 on the undergraduate engineering curriculum and on the calculus);
- Study of the major beginning courses to generate new approaches, including courses offered to satisfy the curriculum requirements of nonscience majors;
- A program to provide incentives for scientists, mathematicians, and engineers to work creatively on course and materials development projects, create new software, and design new approaches to undergraduate instruction; and
- One or more centers for undergraduate instruction, each of sufficient size to provide a viable nucleus of talent to work on educational problems at that level. (Inquiries from the higher education community indicate interest in foci such as the individual scientific disciplines, various multidisciplinary combinations, and several emerging interdisciplinary areas.)

4. Institutional Development

As interactions within an institution of a number of high quality programs are synergistic, so are consortial interactions among institutions. Hence, the USEME Division plans to:

- Initiate a program of challenge grants to colleges, universities, and consortia to support correlated and integrated sets of projects designed to improve undergraduate instructional programs (with emphases on cost-sharing, and on encouragement of partnerships with private sector organizations -- including the science and engineering professional societies).

A major subprogram will provide incentives for forming consortia each involving a lead university (or 4-year college) and a group of 2-year colleges to work on articulation between these types of institutions and to develop coordinated projects for improving lower division instruction in mathematics, the sciences, and pre-engineering technology.

5. Career Access Improvement

Programs for students in the elementary and secondary school age groups that stimulate, motivate, challenge, and in other ways develop and build the interest in science and mathematics of minorities, women, and disabled persons, and help attract them to technical careers as well as prepare them for effective citizenship. Strong college-level programs following successful precollege programs of this type can contribute to the sophisticated science and technology literacy of all students and counter the strong drift toward nontechnical careers between high school and college that, among other causes, results in the present severe underrepresentation of women, minorities and disabled persons in careers in science, mathematics, and engineering. The Career Access Opportunities in Science and Technology for Women, Minorities and the Disabled Program in SEE's Division of Undergraduate Science, Engineering and Mathematics Education addresses these objectives through a set of related sub-programs.

A. NSF Comprehensive Regional Centers for Minorities

The Foundation supports the establishment and initial operation of major regional centers dedicated to systematic approaches that will increase the minority presence in science and engineering. Projects are located in regions of high minority population and are conducted by partnerships among colleges and universities, school systems, state and local governments, professional organizations, community groups, and business and industry. The Comprehensive Regional Centers supported under this program are an important component of the Foundation's diversified efforts to improve mathematics and science education in major urban areas.

Centers are comprehensive in their coverage of science, mathematics and engineering; in their spanning of educational levels (from elementary school through the baccalaureate); and in their emphasis on interaction among cooperating organizations and groups. Each Center is a major operation with NSF support in the neighborhood of $1-million annually for five years.

Center activities include students and teachers at all precollege levels and undergraduate students and faculty. There is basic stress on motivating and challenging within the context of science, mathematics and engineering experiences. In the early school years the potential and possibility of careers in technical fields are emphasized. With more advanced students, special attention is given to improving retention all along the pipeline, especially by providing assistance at the key decision points: between high school and college or university; between a two-year college and a four-year institution; and during the extended and complex transition from undergraduate to graduate school.

Center programs are designed to include community groups as active participants. The involvement of business and industry is of critical importance since it is from those arenas that students can gain a better understanding of career opportunities and the wide range of job activities available in science and technology. Each Center has a National Advisory Committee, jointly approved by the sponsor and NSF, to provide advice and assistance to the Center and to report to NSF on progress; industrial representation on the Committee is required. Each Center is establishing a data-base system to monitor and record current participation in Center activities, and to "track" the future progress and eventual career choices of every Center participant.

Eight Comprehensive Regional Centers for Minorities have been established: at Clark College-Atlanta University (Atlanta); City College of the City University of New York; University of Puerto Rico (San Juan); California State University - Los Angeles; Florida A & M University (Tallahassee, FL); University of Missouri-St.Louis; University of Texas - El Paso; and at PATHS/PRISM (Philadelphia Alliance for Teaching Humanities/Philadelphia Renaissance in Science and Mathematics).

The activities of the Comprehensive Regional Centers for Minorities complement those of the units established under NSF's Minority Research Centers of Excellence (MRCE) Program. At three sites -- the University of Texas - El Paso, the University of Puerto Rico, and CUNY - City College -- the host institution provided competed successfully to establish both kinds of Centers. Effective cooperative relationships have been established between the two underlying programs at each of the three sites and within the NSF Staff.

During the period covered by this Strategic Plan, FY1990 - FY1994:

o The number of Comprehensive Regional Centers for Minorities will be doubled to sixteen. At least twelve of these Centers will target school systems that are among the twenty-five largest in the nation with an enrolled majority of minorities.

- All such Centers for Minorities will be supported in localities of high minority population; their programming will allow local institutions and agencies to work jointly, coherently, and systematically toward increasing the entry and success of minorities in the science, mathematics, and engineering pipelines.

B. Participation Projects for Young Women in Science, and for Disabled Persons in Science.

As groups, women, minorities, and disabled persons are all underrepresented in science and engineering. Alleviation of underrepresentation requires approaches that are tailor-made to the different needs of each underrepresented group.

Beginning in FY1991, the Foundation, within the CAO Program, will support the establishment and initial operation of a substantial number of Participation Projects for young women and for disabled persons in science designed to explore and implement systematic approaches that will increase the presence of women and of disabled persons in science and engineering. Participation Projects will range in scope from the stimulation of interest and prevention of aversion at the precollege level to special support and retention activities for undergraduates.

Participation Projects will be located at institutions with acknowledged expertise in the higher education of women and/or of disabled students. The host institutions may be the sole sponsors; or, as with the Centers for Minorities, the sponsoring entities may be partnerships among colleges and universities, school systems, state and local governments, professional organizations, community groups, and business and industry.

In aggregate, these two families of Participation Projects will be comprehensive in their coverage of science, mathematics and engineering; in their spanning of educational levels (from elementary school through the baccalaureate); and in their emphasis on interaction among cooperating organizations and groups. They will include students and teachers at all precollege levels and undergraduate students and faculty. There will be basic stress on motivating and challenging within the context of science, mathematics, and engineering experiences. In the early school years the potential and possibility of careers in technical fields are emphasized. With more advanced students, special attention is given to improving retention all along the pipeline, especially by providing assistance at the key decision points: between high school and college or university; between a two-year college and a four-year institution; and during the extended and complex transition from undergraduate to graduate school.

During the period FY1990 -FY1994:

- At least fifty Participation Projects for young women and at least twenty for disabled students will be initiated. At least four of each kind will be large, comprehensive, "center-like" projects, and at least two of them of each kind will target school systems that are among the twenty-five largest in the Nation. Programming in these largest projects will allow local institutions and agencies to work jointly, coherently, and systematically toward increasing the entry and success of women and disabled persons in the science, mathematics, and engineering pipelines.

C. Model Projects for Women, Minorities and the Disabled

Model Projects for Women, Minorities and the Disabled support special instructional and outreach activities that are innovative and experimental; they are intended to be models with high potential for dissemination and extended impact. Model Projects are funded modestly and for brief terms (up to $100,000 per year for two years)

Model Projects complement Regional Centers by providing a mechanism for focused and limited testing of new ideas for dealing with underrepresentation in technical careers. Projects designed to study the issues involved in various kinds of underrepresentation are encouraged, as are activities (e.g., regional workshops, national conferences) that will disseminate findings on status and trends in the participation of women, minorities, and disabled persons in careers in science and technology.

Twelve Model Projects have been supported over the past two years; six are focused on women and minorities, five on minorities (two on Native Americans), and one on disabled students.

During the period FY1990 - FY1994:

- Model and demonstration projects (particularly at the high school-college and two-year/four-year college interfaces) will be supported that strengthen the capability of institutions to attract the underrepresented to study in NSF's fields.

6. Engineering Education Coalitions

Recent studies of U.S. engineering education and its output have concluded that: a major shortfall of engineers at all levels is projected by the year 2000; undergraduate engineering education is in need of comprehensive restructuring; and the engineering education system needs more integration and coordination. To meet these challenges, the Directorate for Engineering and the Directorate for Science and Engineering Education will initiate in FY1990 a program of multi-year support for a small number of major coalitions of U.S. institutions engaged in the education of future engineers.

The Engineering Education Coalitions program (EEC) will help the collaborating institutions to:

- increase dramatically the quality of U.S. undergraduate engineering education as well as the number of engineering baccalaureate degrees awarded, especially to women and underrepresented minorities;
- design, implement, evaluate, and disseminate new structures and fresh approaches affecting all aspects of U.S. undergraduate engineering education, including both curriculum content and significant new instructional delivery systems; and
- create significant intellectual exchange and substantive resource linkages among major U.S. engineering baccalaureate-producing institutions and other major and smaller institutions.

In order to be considered competitive for Foundation support, a proposed coalition of institutions:

- should comprise primarily baccalaureate-producing institutions that exhibit a broad perspective of the engineering education system;
- should have awarded collectively at least 2,000 undergraduate engineering degrees annually to U.S. citizens and permanent residents, including 300 degrees to minorities who are underrepresented in engineering and 600 degrees to women, based on a yearly average for the three calendar years 1987-1989;
- should have a clear vision and well-formulated plans for comprehensive restructuring and reshaping of the undergraduate engineering learning experience involving the breadth of engineering and all levels of undergraduate engineering education;
- should be an agent of active inter-institutional collaboration with significant intellectual and resources linkages;
- should have well-developed plans for integrating the proposed activities into the academic programs of its member institutions within the period of the award; and
- should contribute significant and tangible resources that reflect the unique interests and capabilities of the institutions.

The Foundation anticipates funding as many as three coalitions, with each one supported at the level of $2-3 million per year for up to five years.

7. Research for Undergraduate Students

The Research Experiences for Undergraduates Program (REU) promotes direct collaborative participation in academic or industrial research by promising undergraduate students. The REU Program (1) supports the creation and operation of undergraduate research sites in established industrial and academic research laboratories, and (2) provides access to research experiences by incrementing current NSF research awards so that undergraduate students can be brought onto the research team.

- The expansion and evolution of the REU program will continue to emphasize involvement of students from underrepresented groups, and of those enrolled in colleges that do not have substantial established research programs; and
- A complementary program will be instituted that supports student research projects under the direction of a faculty member (complementing REU, which supports students to work on faculty research projects).
- Special programs will be mounted to expose undergraduates to the geosciences, and computer and information sciences; planning will be started on new approaches to introductory biological and behavioral science courses; and the Research Careers for Minority Scholars program will be expanded.

8. Planning and Evaluation

An important function of the Division of Undergraduate Science, Engineering, and Mathematics Education (USEME) will be to manage the collection and dissemination of information related to NSF's undergraduate mission. In the next five years, USEME will:

- Work with SEE's Office of Studies and Program Assessment, NSF's Science Resources Studies group, and the Department of Education to develop a data base activity for undergraduate science, engineering, and mathematics education similar to that now operating at the precollege level, so as to provide continuing information on faculty, students, curriculum change, instrumentation, expenditures, etc., for planners and decision makers; and
- Design and implement information dissemination mechanisms to assist continuing improvement of undergraduate science, mathematics, and engineering education.

C. Impact in FY1994

By FY1994:

- The Instrumentation and Laboratory Development program will be supporting projects in every part of the country in every NSF discipline. Redevelopment of large enrollment laboratories will be well underway as will experimentation with computer control and simulation of various laboratory activities.
- Faculty members from colleges and universities across the nation will be attending refresher and enhancement sessions at regional sites, while additional faculty will participate in programs for individuals.
- Major changes in the Calculus and Engineering curricula will have been made at numerous colleges and universities. Many research-active faculty members will be involved in materials and curriculum development activities (especially in applying advanced technologies).
- The impacts of challenge grants will reach past the awardee college, university, or consortium, to influence similar and neighboring institutions through a ripple effect.
- Sixteen NSF Comprehensive Regional Centers will be located in the nation's major centers of minority population; numerous Participation Projects for women and disabled persons in science will be operating. A major goal will be to achieve measurable success in their efforts to recruit and retain minorities, disabled, and women students in studies that lead to graduate degree programs in science, mathematics, and engineering. Career access improvement activities and outreach projects will have substantial impact on the institutions involved and on the special communities they serve; there will be lively demand for exportation of these model projects.
- Pending availability of funds, at least ten Engineering Education Coalitions will be established and engaged in restructuring and reshaping undergraduate engineering education in the collaborating institutions.
- Research Experiences for Undergraduates and a complementary program will be reaching many college and university students interested in science, mathematics, and engineering. Both programs will have the same kind of substantial and favorable indirect impact as the Graduate Fellowship Programs.
- Planning and evaluation activities will result in improved development and management of the Foundation's undergraduate education programs.

III. GRADUATE LEVEL AND BEYOND

The Division of Research Career Development (RCD) manages the Graduate and Minority Graduate Fellowships Programs, NATO Postdoctoral Fellowships in Science Program, Advanced Institute Travel Awards Program, Presidential Young Investigator Awards Program, and the Young Scholars Program (see page 23, above).

A. Program Activities and Impacts in FY1994

Programs of the RCD Division focus on (1) the predoctoral period of final preparation for a research career, and (2) the postdoctoral/young faculty period during which new investigators establish the pattern of their research activities.

1. Graduate/Predoctoral Programs

SEE's principal research career development activities are the Graduate Fellowship Program and the Minority Graduate Fellowship Program. Through this prestigious pair of programs, a core group of outstanding graduate students is identified and provided extended support for advanced education.

A new Women in Engineering component of 80 Graduate Fellowships per year was initiated in FY1989 to address the most serious deficiency in the generally broadening opportunities for women in science and engineering. This component is funded jointly by the Directorate for Science and Engineering Education and the Directorate for Engineering; it will be phased in fully in FY1991.

FY1990 is the second year of a three-year administrative transition to different timing of the obligation of funds for the whole Fellowship program. NSF is moving from obligation of funds in the fiscal year in which fellowship commitments are made to obligation of funds in the fiscal year in which tenure is primarily exercised (Adjusted Schedule). The transition will encumber a onetime catchup increment of approximately $21 million in funding for the Fellowships Program in FY 1992. The planned transition is detailed in the following table:

	FY 1989	1990	1991	1992	1993
New Awards (SEE)	860	960	1060	1060	1060
Fellows on Tenure (Est.)	1865	2280	2560	2750	2850
Cost (Millions of dollars)					
Adjusted Schedule	$24.0	$29.9	$35.9	$56.6	$61.8

During the period FY1990 - FY1994:

- The number of new starts in the Graduate and Minority Graduate Fellowship Programs will be increased to 1060 per year in FY1991, almost double the number in FY1987.

The Graduate Fellowship programs are effective instruments for encouraging the most highly talented young scientists, mathematicians, and engineers to undertake the rigors of graduate study.

2. Postdoctoral/Young Faculty Programs

The postdoctoral component of NSF's educational activities is the NATO Postdoctoral Fellowships in Science Program, through which outstanding recent doctoral recipients are enabled to study at overseas research sites. The program is administered by NSF but funded directly by NATO; it is likely to remain at its present size.

The Presidential Young Investigators Program is the young faculty component of NSF's education and research support activities. Through it outstanding young scientists, mathematicians, and engineers are helped to initiate and maintain the research activities that are expected of those in tenure-track faculty positions. Programmatic funds are provided by the various research directorates; total funding and the allocations of awards to the various disciplinary fields will continue to be reviewed and adjusted annually.

These two programs constitute major efforts by the Foundation to make academic research careers attractive to the brightest young scientists, mathematicians, and engineers produced by the Nation's graduate schools, and to provide many of them with experience overseas to fit them for tomorrow's international research environment.

Senator PELL. Dr. Bailey.

Mr. BAILEY. Mr. Chairman and members of the Senate Subcommittee on Education, Arts and Humanities, I am pleased to appear before you this morning with regard to Excellence in Education Act (S. 1675) and the National Teacher Act of 1989 (S. 1676).

Let me begin by commending you for your initiative in developing these two proposals. They are significant in their focus, design and level of support, and I hope that they can be combined in such a way to not lose their potential impact upon schools and teacher education programs. Both are comprehensive in their scope and promise a new level of partnership.

There are only about three points that I would like to make, Senator Pell. They are in my written comments, so if they could be a part of the record, I will——

Senator PELL. They will be inserted in the record in full.

Mr. BAILEY. Thank you.

One of those points deals with the need for real university and public school partnerships. That is something that has been particularly lacking, particularly from universities in years past.

The second point deals with the need to recruit minority students into education and to make sure that all people who teach in classrooms have not only content specialties but an understanding of the culture of the schools, understand the kids that they are dealing with, and be able to communicate effectively with them.

Finally, I would like to suggest that I am very impressed with the loan forgiveness provisions of both programs.

If I could deviate from those remarks just very briefly, one of the advantages of being last on the program is that you get to learn from the people who precede you. If I could make a comment about Senator Boren's, S. 429, about teacher quality, I would just like to suggest to the committee that describing teacher education in universal terms is a very difficult thing to do. There are a thousand institutions of higher education in the country that give varying degrees of quality preparation to their students and in fact have various numbers of students in them.

I am certain that Ted Sizer in his work at Brown would not find his students in the bottom quartile of his class, of their high school classes. Ninety percent of our kids are in the top half of their classes, and two-thirds of them are in the top quarter.

I would also suggest that the reserve pool that the representative of the administration referred to earlier is one that I would hope that the committee would look strongly and carefully at. There are reasons why those folks do not have jobs. It is not simply that there are not enough jobs to go around.

There is no question about shortages. In the next few years the entire teacher education preparation population of the State of Kansas could be dropped into the City of Houston, and there would still be a need for new teachers next year.

Finally, I would like to mention to Senator Cochran, if he were still here, that we do have one of the branches of the National Writing Project. We would urge your consideration on that legislation. We also have had support from the National Science Foundation; we appreciate that.

If I could just complete with the written portion of my remarks, if I can.

Finally, my spouse and I—incidentally, Barbara has two degrees from URI. My spouse and I have a 6-year-old son.

Senator PELL. Is she here?

Mr. BAILEY. No. She is working.

We have a 6-year-old son. Andrew was born white, male, healthy and as comfortable as two Kansas public-service salaries can make him. He is at least average in ability and was born into an educationally enriched community. His condition is abnormal. When historians of education write about the 1990s, they will evaluate us on how we dealt with the decade's big problems: The education of the Nation's tens of millions of very young children and urban at-risk children and youth.

As policy makers, educators and citizens, we face major crises in these areas. I and my colleagues thank you for having the fortitude to acknowledge these problems and the foresight to address them.

Thank you.

Senator PELL. Thank you very much indeed.

Without objection, your written statement will be inserted into the record.

[The prepared statement of Mr. Bailey follows:]

PREPARED STATEMENT OF MR. BAILEY

Mr. Chairman, members of the Senate Subcommittee on Education, Arts and Humanities, I am pleased to appear before you this morning with regard to the Excellence in Teaching Act (S. 1675 and the National Teacher Act of 1989 (S. 1676).

Let me begin by commending you for your initiative in developing these two proposals. They are significant in their focus, design and level of support and I hope that they can be combined in such a way as to not lose their potential impact upon schools and teacher education programs. Both are comprehensive in their scope and promise a new level of partnership between the federal government, states, and universities and the schools.

First, the legislation that is enacted should be written in such a manner that makes it attractive for institutions of higher education to become involved in a truly meaningful way with local education agencies. And, local districts should find it worthwhile to work with universities on issues of common concern. Schools of education have been the point at which these two institutions have come together in the past. But, both must understand that the initial and continuing education of teachers is a university-wide as well as district responsibility.

Problems facing education over the next decade demand everyone's attention. Schools of education as well as local districts have talented people. We must utilize all of our talent in staff development and renewal activities. I support strongly the language in Senator Kennedy's Title II—Professional Development Academics—that mandates partnerships between schools and universities.

Second, I am deeply concerned about the lack of significant numbers of students of color entering teacher education programs. The facts are that majority teachers will teach most minority young people for at least the next decade. More minority applicants must be recruited—and retained. But, majority teachers must also learn to teach students different from themselves.

(a). Let us be sure that preparation programs give all teachers real opportunities for success. Nothing smacks so much of insensitive behavior as the placing of a person in a position where he or she is destined to fail. All teacher preparation programs should help their participants understand the culture of the schools, master content specialty, understand students, and translate the content into meaningful learning experiences for students. I fear that "quick fix" programs cannot deliver all that they promise.

(b). I fully support the Kennedy provision for TRIO programs for future teachers. We should also support the efforts of organizations such as the Association of Teacher Educators and its Future Educators of America clubs as well as local district-sponsored "grow your own programs."

Third, I am impressed with the loan forgiveness titles in both pieces of legislation. Two years of support may not be adequate for some students in the proposed Teacher Corps. The language in the Pell bill is to be applauded for its inclusion of students in extended programs.[1] The opportunities for self renewal for senior teachers in the Kennedy bill is especially attractive—is the authorization adequate? Assuming full funding (12.1 million), about 800 teachers per year could be supported.

Finally, my spouse and I have a 6-year old son. Andrew was born white, male, health and as comfortable as two Kansas public-service salaries can make him. He is at least average in ability and was born into an educationally enriched community. His condition is abnormal. When historians of education write about the 1990s, they will evaluate us on how we dealt with the decade's big problems—the education of the nation's tens of millions of very young children and urban at-risk children and youth. As policy makers, educators and citizens we face major crises in these areas. I, and my colleagues, thank you for having the fortitude to acknowledge these problems and the foresight to address them.

Senator PELL. Thank you, Dr. Bailey. I am sure that Senator Kassebaum will be interested in your testimony, as she said.

I thank each of you for being with us. Because of time pressures, I am going to have to adjourn the hearing; but we may well submit some written questions to you and make it part of the record, if that would be agreeable with you to respond in writing.

Senator PELL. Thank you very much indeed. It is excellent testimony. I appreciate the approach each of you had.

Without objection, the statement of Mr. James Gray will be made a part of the record.

[The prepared statement of Mr. Gray and additional statements and material submitted for the record follow:]

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[1] A prime problem for students in our teacher education program is that they cannot secure Pell money for their fifth year as they complete the BSE degree at the end of eight semesters.

United States Senate
Committee on Labor and Human Resources

Subcommittee on Education, Arts and Humanities

Hearings

Written Testimony of

James R. Gray, Director
National Writing Project
University of California, Berkeley

March 2, 1990

ABSTRACT

S2039 will focus the nation's attention on the vital importance of improving writing and the teaching of writing in the classrooms of America. Writing is fundamental to student learning. It is key to educational advancement and retention, and, increasingly, it is key to job performance and advancement in the workplace. The funding provided by S2039 will support the work of the National Writing Project and its nationwide network of sites to:

- improve the writing and extend the range of writing asked of all students, kindergarten through university, in the nation's schools,
- improve the teaching of writing at all levels of instruction and extend the uses of writing as fundamental to learning in the disciplines, including mathematics, science, history and social studies, as well as English,
- extend nationwide research on the teaching of writing—including research conducted by classroom teachers, and
- expand the network of the National Writing Project into all states to serve classroom teachers in all regions of the country.

BENEFITS TO THE NATION

The nation's teacher corps in all regions of the country and at all levels of instruction will be better trained to teach writing.

Students—all students—will improve their writing performance and will be better prepared to enter the nation's colleges and universities or the nation's workforce. They will be better able to express themselves and to put their ideas into words. They will improve their sense of self-esteem.

A national dissemination network for informing teachers of developments in research and practice in the teaching of writing and thinking will be expanded.

A nationwide, effective model of university-school collaboration will be further developed, which can continue to serve as a model of staff development suitable for teachers in all disciplines.

The efforts and accomplishments of good teachers throughout the nation will receive long overdue recognition. Teacher morale will be improved.

BACKGROUND: THE GENERAL PROBLEM

For the past two decades, the United States has faced a crisis in English writing in schools and in the workplace. By the mid-70's, the nation's press was reporting that universities across the nation were deeply concerned over the growing number of entering freshmen who were unable to write at a level equal to the demands of college work. American businesses and corporations were concerned over the limited writing skills of entry-level workers, and a growing number of middle-level managers were reporting that further advancement was denied to them because of inadequate writing abilities. The writing problem has been further magnified by the rapidly changing student populations in American schools and the growing number of students who are now 'at risk' because of their limited proficiency in English.

BACKGROUND: THE SPECIFIC PROBLEMS AND SOLUTION

Since 1974, the only national program to address the writing problem in the nation's schools has been the National Writing Project (NWP), a growing network of collaborative university-school programs modeled upon the Bay Area Writing Project at the University of California, Berkeley.

The writing project was established in 1973-1974 to address a number of serious problems—local problems that were echoed across the country:

- In 1973 close to 50% of UC Berkeley's entering freshmen class—bright students who had graduated in the top twelve and a half per cent of their classes—were required to enroll in the university's remedial course in writing.

- In 1973, most teachers in the schools—elementary and secondary—had not been trained to teach writing. Writing—the second 'R'—had been historically neglected. Teachers in university teacher training programs were trained to teach reading but not writing. The National Council of Teachers of English, the professional organization for English teachers, could not cite one university in the nation that offered prospective teachers a course on the teaching of writing.

- Throughout the 1970's there was little writing asked of students, either during school hours or at home. A major study on Writing in the Secondary School (Appleby, 1981) found that while students were engaged in writing-related activities 41% during the typical school day, they were asked to write at more-than-sentence length only 3% of the time.

- Traditionally, there has been little use of writing, a proven and powerful tool to promote learning and thinking, either in English classes or in other classes across the curriculum.

- Before the development of the nationwide network of the National Writing Project, there was no active dissemination network to inform and teach teachers of developments in the field of written composition.

- Before the beginnings of the writing project, neither the universities nor the schools offered systematic programs for the continuing education of classroom teachers, and the rare workshops that were offered to teachers seldom addressed subject matter issues and problems, e.g., the teaching of writing.

THE NATIONAL WRITING PROJECT MODEL

The National Writing Project has addressed all of the above problems through the development of a model and program design based on the following basic assumptions:

1. The university and the schools must work together as partners. The "top-down" tradition of past university-school programs is no longer acceptable as a staff development model.

2. Successful teachers of writing can be identified, brought together during university Summer Institutes and trained to teach other teachers in follow-up programs in the schools. Such teachers exist in every region of the nation, teachers who have learned how to teach writing successfully since they began teaching and are currently teaching in urban, suburban, and rural schools to the entire range of students now attending our nation's schools.

3. Teachers are the best teachers of other teachers; successful practicing teachers have a credibility no outside consultant can match.

4. Summer Institutes must involve teachers from all levels of instruction, elementary school through university; student writing needs constant attention and repetition from the early primary grades on through the university years.

5. Summer Institutes must involve teachers from across the disciplines; writing is as fundamental to learning in science, in mathematics and in history, as it is in English and the language arts.

6. Teachers of writing must also write. Teachers must experience what they are asking of their students when they have students write; the process of writing can be understood best by engaging in that process firsthand.

7. Real change in classroom practice happens over time; effective staff development programs are ongoing and systematic, bringing teachers together regularly throughout their careers to test and evaluate the best practices of other teachers and the continuing developments in the field.

8. What is known about the teaching of writing comes not only from research but from the practice of those who teach writing.

9. The National Writing Project, by promoting no single "right" approach to the teaching of writing, is now and will always be open to whatever is known about writing from whatever source.

10. Reform in education takes place in the classroom. The National Writing Project believes that the key agent in educational change is the classroom teacher who stands at the center of successful reform efforts to improve the education of the nation's students.

THE NWP: WHAT IT DOES

Each year at all NWP sites, successful teachers of writing, K-University, are invited to university campuses for intensive five-week Summer Institutes. The aims of the institute are simple: to provide teachers a setting in which they can demonstrate their own best practices and share classroom successes; to help teachers broaden and make more conscious the grounds of their teaching through an examination of writing theory and research; to give teachers of writing an opportunity to commit themselves intensely and reflectively to the process of writing by writing themselves and by reviewing each others' written pieces in small editing response groups; and finally, to identify and train a corps of writing teachers who can effectively teach the approaches and processes of teaching writing to other teachers.

After the summer institutes and during the following school year, the teachers trained in the institutes join with other NWP Teacher Consultants who have participated in previous institutes to plan and conduct year-long staff development workshops on the teaching of writing in project-sponsored programs in the schools. By policy, these professional development workshops are voluntary. They are typically scheduled after school hours for 10 three-hour sessions spaced at intervals throughout the year. Districts and schools in the writing project's service area frequently continue this workshop series year after year.

The National Writing Project teachers-teaching-teachers reform program identifies and promotes what is working in the classrooms of the nation's best teachers. It is a positive program that celebrates good teaching practice and good teachers and—through its work in the schools—steadily increases the nation's corps of successful classroom teachers.

IMPACT OF THE NATIONAL WRITING PROJECT

Numbers of Teachers Trained: Classroom teachers in all parts of the nation have responded to the teaching of fellow teachers in ever increasing numbers. Currently, approximately 85,000 teachers each year voluntarily seek training in National Writing Project summer and school-year programs. And over 600,000 teachers, administrators and others have participated in National Writing Project summer and school year programs since the project began in 1974!

Nationwide Replication of the Writing Project Model: The acceptance of the National Writing Project model by classroom teachers and university faculty nationwide is also evident in the extraordinary expansion of the project over the past seventeen years. Since 1973, the National Writing Project has grown into a national/international network that currently numbers 143 sites in 44 states. The National Writing Project also has 14 sites outside of the United States that serve American teachers overseas who teach in Department of Defense Dependent Schools and in U.S. Independent Schools.

Replication of the NWP Model by Subject Matter Projects in Other Disciplines: The National Writing Project model has been the prototype for the American Mathematics Project. In California, the California Writing Project serves as the model for the statewide subject matter projects in mathematics, science, literature, arts, and foreign languages. In Nebraska, the writing project has served as the model for the Nebraska Literature Project and in Massachusetts for the NEH/Boston Humanities Project.

National Dissemination Network: The National Writing Project serves as the dissemination arm of the federally-funded Center for the Study of Writing located at the University of California, Berkeley. As such, the project ensures that the Center's research is sensitive to the needs of expert teachers and that teachers, in turn, are aware of new findings and theories that support the best classroom practices.

EVALUATION OF THE NATIONAL WRITING PROJECT

Carnegie Evaluation: In 1976, the Carnegie Corporation of New York funded a three-year outside evaluation of the Bay Area Writing Project/National Writing Project. This evaluation resulted in the publication of 24 Technical Reports. In his Executive Summary, the Director of this Carnegie Evaluation, Professor Michael Scriven—at that time Director, Evaluation Institute, University of San Francisco—

stated that the writing project "appears to be the best large-scale effort to improve composition instruction now in operation in this country, and certainly is the best on which substantial data are available."

NWP Evaluation Portfolio: In 1983, the National Writing Project published the NWP Evaluation Portfolio, a collection of 32 evaluation studies conducted at sites of the National Writing Project. These studies are grouped under three categories: Impact on Student Writing, Impact of NWP Training on Teachers, and Other Measures of Impact and Effectiveness.

IMPACT ON STUDENT WRITING

Note: The most important goal of all National Writing Project programs is to improve student writing skills, and the most important evaluation task of the NWP is to measure the impact of NWP training on participants' students. The Questions and Answers below were written by the team of evaluators who compiled the NWP Evaluation Portfolio based on present "state of the art" evaluation designs.

1. (Q) Has the model proved to be effective in its most intense form (the summer institute) as well as its less intense form of training (the school year inservice)?

   (A) Studies of student impact have found statistically and educationally significant gains in the skills of teachers trained in the summer institute as well as in the school year inservice.

2. (Q) Has the model proved to be effective in different geographical contexts?

   (A) Statistically and educationally significant gains in writing skills have been observed in rural, suburban, and urban students throughout the United States.

3. (Q) Has the model proved to be effective with students at different grade levels and at different skill levels?

   (A) Elementary, secondary, and college students possessing a range of skills (remedial to superior) have demonstrated statistically and educationally significant gains in writing skills.

4. (Q) Has the model proved effective with teachers of students from a variety of racial-ethnic backgrounds and socio-economic levels?

(A) Studies of student impact that record statistically and educationally significant gains have included students from minority racial and ethnic backgrounds as well as students from a variety of socioeconomic backgrounds.

5. (Q) Have the effects proved stable over time?

(A) In at least two studies which lasted two or three years the students of project teachers demonstrated statistically and educationally significant gains in skills. In addition, the studies reported here have been conducted over a five year period, suggesting that the model continues to be effective.

6. (Q) Have particular methods and approaches promoted by the NWP received validation in practice studies?

(A) A number of the particular practices presented at the different writing project sites have been validated in evaluation studies.

IMPACT OF NWP TRAINING ON TEACHERS

Note: Even when the most conservative interpretations are made, the findings of teacher-impact studies remain highly consistent. In the evaluation studies conducted to date, teachers almost unanimously report positive changes as a result of their training. In the few cases where comparison data have been collected, the NWP participants view their Writing Project training as more positive than any other training they have received.

1. (Q) How does the BAWP/NWP model compare with other models in teachers' perceptions of effectiveness and in their reports of changes in practices?

(A) Compared to other training models, the existing data suggest that the NWP model produces greater changes in practices and attitudes and is perceived as more useful to participants as teachers of composition and as professional consultants than do other training models.

2. (Q) Are there differences in impact on participants observed for the more intense form of training, the summer institute, compared to the less intense form, the school-year inservice?

(A) Teachers in both types of training report changes in approach consistent with the NWP composition model. These include adopting a process approach to teaching writing (including instruction and practice in prewriting and revising), increasing the types of writing students do, increasing the amount of writing and the number of real audiences for whom the students write. Teachers in both types of training also report similar attitudinal changes: increased enthusiasm for teaching writing, more confidence in their ability to teach writing and a resulting improvement in their students' attitudes and skills. Teachers in both groups also report a more positive view of themselves as professionals. However, increases in leadership roles such as working with peers to effect changes in curriculum and testing policies are more frequently reported by summer institute participants.

3. (Q) How effective is the BAWP/NWP training model with teachers at different grade levels and with students of different skill levels?

(A) Teachers from elementary through college grade levels working with remedial, average, and advanced students appear to be equally enthusiastic about their training experience.

4. (Q) How effective is the BAWP/NWP training model with teachers working in subject areas other than English, including science, mathematics, art, design, and the social sciences?

(A) Teachers working across the curriculum report that their NWP training increases their effectiveness in teaching their subjects.

5. (Q) How effectively does the BAWP/NWP model relate composition theory to composition practice?

(A) Data suggest that the model successfully avoids a "recipes approach" to training and assists participants in relating theory to classroom practice.

6. (Q) Are reported training effects sustained over longer periods of time, up to at least five years?

(A) Longitudinal data suggests that teachers' perceptions of project impact persist at a high level over long periods of time after their training (the longest measured being five years).

7. (Q) How consistently has the quality of training been maintained at individual sites over several years?

(A) Data collected from different participants in successive years at the same sites suggest that training impact remains consistently high year after year.

OTHER MEASURES OF IMPACT AND EFFECTIVENESS

Note: In addition to the evaluation of NWP impact on students and teachers, a few other types of impact and effectiveness have been examined. A sampling of findings from a number of these studies is reported below:

1. (Q) How consistently is the BAWP-NWP training model replicated at sites across the country? What are permissible local adaptations?

   (A) A survey of NWP site directors suggests that the basic features of the model are consistently incorporated at each site, with adaptations occurring in some operational features of the programs.

2. (Q) What other types of impact occur at the level of the school, the district, the university, and the state?

   (A) NWP programs appear to be contributing to changes in curriculum, course offerings, and educational policy at school districts, university, and state levels.

3. (Q) How cost-effective is the BAWP-NWP model? How does its development and operational costs compare with those of other professional development and curriculum projects?

   (A) A study of the cost of the training model in comparison to other training and curriculum development projects suggests that the model is highly cost effective.

A Sampling of Recent Local Site Evaluation Studies:

1. Bay Area Writing Project. Teachers at Bret Harte Junior High School in Oakland, California, in collaboration with the Bay Area Writing Project, conducted a pre-post schoolwide (grades 7, 8 and 9) writing assessment to evaluate the effects of their teaching after over 100 hours of Bay Area Writing Project inservice. Approximately 70% of the students improved overall relative to their performances on the pretest. On the specific dimensions, 65% improved in fluency, 56% improved in sentence development, 62% improved in specificity, 66% improved in organization, and 61% improved in providing illustrations and/or examples. Overall, 83% of the English as Second Language (ESL) students improved. In addition, more students improved in the second year of the pre-post assessment than in the first. Sixty-two percent of the students improved in 1988; 70% improved in 1989. Ninety-seven percent of the Bret Harte students are minority.

2. New York City Writing Project. The Writing Teachers' Consortium, (W.T.C.) is a staff development and support program designed by the New York City Writing Project in cooperation with Lehman College. The W.T.C. program has been a joint project of Lehman College and the Board of Education since 1984-85. The Office of Research, Evaluation and Assessment (OREA) conducted a comprehensive evaluation of the 1987-88 W.T.C. program, collecting both quantitative data on students and qualitative data about teachers and program implementation at all participating eleven high schools.

   Findings show that teachers clearly increased their use of a range of writing techniques. Student outcomes were positive as well. Eighty-eight percent of Core students but only 72% of control group students received passing scores on the composition section of an unsecured version of the Regents Competency Test (R.C.T.) in Writing ($t=3.42$, $p<.001$) and students in the 1986-87 Core program (87%) passed the writing R.C.T. at a significantly higher rate than control group students (80%) (chi square = 13.92, $p<.0002$). There was a trend toward higher attendance in Core group students although reading scores did not differ between Core and control group students. Core group students' attitudes toward school were high and remained so throughout the program.

3. Mississippi Writing/Thinking Institute. In 1987, the Mississippi State Department of Education asked the Mississippi Writing/Thinking Institute (Mississippi's network of National Writing Project sites) to develop a remedial reading and mathematics curriculum and accompanying staff development for teachers. The curriculum was developed with a clear understanding that writing-to-learn and writing process would be the primary approaches to learning and that skills would be taught in a meaningful context, not in isolation. The eight-week pilot program involved 1,500 high school or drop-out students. A gain of four months in each subject area was expected. The actual gain in reading averaged 1 year, 7 months; the mathematics gain averaged 1 year, 9 months.

   The Mississippi Writing/Thinking Institute has since developed a school-year remedial curriculum consisting of a reading course, a math course, and a writing course along with intensive staff development for teachers. The program is in use in Mississippi high schools with students who have failed or who are at risk of failing the Functional Literacy Examination, a requirement for graduation in Mississippi. Teachers report that students benefit in academic achievement and attitudes about school and that teachers experience renewed enthusiasm for teaching, a result of the staff development accompanying the program.

4. Caprock Writing Project. In the Lubbock, Texas area, the performance of Morton Independent School District fifth graders serves as a dramatic example of project impact. In 1985, four months before the Caprock Area Writing Project began, 34.5% of these students, 62% of whom were Hispanic, failed the state writing exam. By 1988, their teacher, a first-year Caprock participant, had changed the failure rate to 3% and the pass rate to 97%. Based on this exceptional leap in achievement, the Exemplary Programs Division of the Texas Education Agency recognized both the district and the Caprock Area Writing Project as centers of excellence.

5. Boston Writing Project. The Boston Writing Project works closely with the racially and linguistically diverse schools of the Greater Boston Area, and has on file evaluation findings which demonstrate that multicultural approaches to the teaching of writing improve teacher effectiveness and morale and can dramatically improve students' motivation and writing skill. An outstanding case in point occurred last year when Boston Writing Project Teacher Consultant Judith Baker, an English teacher at Boston's Madison Park High School, turned a group of students which included many reluctant writers and non-writers into a highly motivated staff of reporters and writers for a special anti-drug issue of the school newspaper. The students produced well-written news stories, interviews, op ed essays and poems around the theme "Cocaine: A New Slavery." The resulting publication was so successful that thousands of copies of the paper have been reprinted and are being used as curriculum material in Boston classrooms.

HONORS AND RECOGNITIONS

In 1978, the University of California, Berkeley Bay Area Writing Project received the annual Western Electric Award in Education "in recognition of outstanding achievement in meeting today's educational needs."

In 1984, at the culminating event of the American Association for Higher Education's Annual Conference on Higher Education, the National Writing Project was honored "as an outstanding and nationally significant example of how schools and colleges can collaborate to improve American education."

In 1987, at the final meeting of the National Council of Teachers of English Annual Convention, the National Writing Project was honored and recognized as "an exemplary national resource."

In 1988, in the final report of the two-year evaluation of staff development programs in California funded by the California Legislature and conducted by the Far West Laboratory for Educational Research and Development and by Policy Analysis of California Education (PACE), the California Writing Project was recognized as "one model that deserves attention for university-based staff development," and as a project "which has earned the admiration of teachers and administrators throughout the state," and as a project that "has served as a model for other university-sponsored staff development programs."

In 1989, the National Council of Teachers of English (NCTE) granted the profession's annual premiere recognition of achievement, the Distinguished Service Award, to the National Writing Project Director.

"As for the character of the work, I have no hesitation in saying that the National Writing Project has been by far the most effective and 'cost-effective' project in the history of the Endowment's support for elementary and secondary education programs."

–John Hale, National Endowment for the Humanities

"The model staff development program you have developed, that has universities working together with schools at all levels, merits the support of those who value excellence in education. Your project gives some of the most dedicated and capable teachers the vital nourishment they need,"

–William Bennett, Secretary of Education

"The National Writing Project has done more than anything else in this country for the teaching of writing."

–Peter Greer, Deputy Undersecretary, Department of Education

"[BAWP] has stirred up English teachers to an extent that I have seldom if ever seen. I was closely involved in the work of some of the research and development centers established by Project English, but none of them started what one would call a 'movement.' I now believe that the Bay Area Writing Project really has started a movement that is sweeping the country.... With all my bias in favor of hard data, I am already pretty sure that this is one of those ideas that will last—like Langdell's invention of the case method of teaching law about 1870."

–Paul Dietrich, Educational Testing Service

"There would be a terrible void in American education had there been no National Writing Project."

–Roger Rosenblatt, Time Magazine

"If I were an administrator, I'd want to get every teacher in my school out to the Writing Project; I wouldn't consider hiring any unless they had been trained by it."

–James Squire, Former Executive Director, NCTE

"There is absolutely no doubt in my mind that the Writing Project is the best thing that has happened to our region and our state in my twelve years of teaching. This year alone, I have worked with over 200 teachers, this in a rural and mountainous area where schools are isolated and distant from our campus. Through the Project, teachers have been able to meet and learn about writing and more, and their lives have been changed. That sounds, perhaps, melodramatic, but it's the truth."

—Charles Whitaker, Director, Eastern Kentucky Writing Project

Finally, the project continues to be cited by the local and national press for its major role in improving the quality of education in the country with prominent stories in the *New York Times, Washington Post, Los Angeles Times, Newsweek, U.S. News and World Report,* and *Phi Delta Kappan,* as well as in popular family publications and on national television networks. An education reporter for the *Sacramento Union* once referred to the project as "the one education program in California that only has friends."

THE NEED FOR FEDERAL SUPPORT

(1) The National Writing Project seeks federal support to provide for the continued development of the project and regular support for all sites within all states and regions of the nation.

The basic goal of the National Writing Project is to improve the quality of student writing and the teaching of writing in all regions of the country. To do this, the NWP must develop an expanded network of at least 250 sites nationwide. Currently the national project is growing at the rate of approximately five new sites each year; this rate of development will increase with federal support.

In addition to the need to develop and expand the NWP network of sites is the need to provide on-going support for sites within the national network through a combination of federal, state, and local support. At present the funding levels of local NWP sites varies considerably; no sites within the network are adequately supported, although some are more financially stable than others. Currently, only twelve states provide some degree of state funding for their networks of sites (California, Virginia, West Virginia, North Carolina, Hawaii, Alaska, Kentucky, Connecticut, Nevada, Mississippi, Louisiana, and Pennsylvania). Federal support in the form of matching funds will hasten the development of state-supported networks of NWP sites as well as provide needed stability for the National Writing Project network.

(2) The National Writing Project seeks federal support to provide the funding needed to support NWP networking activities and NWP administration.

Equally important is the need to provide funding for the lead agency of the National Writing Project. While local NWP sites and the statewide networks of NWP sites receive support from their sponsoring universities, from surrounding school districts, and—in the twelve states listed—from direct state funding, there is no comparable funding for the National Writing Project itself. The national project—which provides matching funds to all new sites, which conducts, supports, and maintains all of the networking, quality control and dissemination activities that tie the local sites into a coherent nationwide program, and which handles all national administration—has no national support. The NWP has had to rely primarily upon extramural funding from private foundations. Yet private foundations are unwilling to maintain programs over time—no matter how successful those programs have been! The many rounds of grants the project has received from the National Endowment for the Humanities and the Carnegie Corporation of New York and other foundations have finally come to a close. The Andrew W. Mellon Foundation, which currently supports new site development, has given the NWP a third grant. To help make the project more self-supporting, the NWP established in 1987 a national sponsorship campaign that generates support from the institutions and classroom teachers who participate in the National Writing Project. This campaign now pays for itself and does provide some level of administrative support, but such a teacher-centered fundraising effort will never be sufficient to meet the national need.

(3) Previous Support (Extramural funding) for NWP.

Year	National Endowment for the Humanities		Carnegie	Mellon
	Outright	Gifts/Matching		
1973-74				
1974-75				
1975-76				
1976-77	535,997	1,018,300	216,950	
1977-78				
1978-79				
1979-80	96,309	350,000	61,133	
1980-81	134,449	180,000	65,145	
1981-82	264,641	130,000	69,994	
1982-83	100,000	150,000	137,000	
1983-84			78,000	300,000
1984-85		200,000		
1985-86		200,000		
1986-87		200,000		350,000
1987-88				
1988-89				
1989-92				350,000

NWP Extramural funding cont'd

Year	N.I.E	Western Electric	Bankamerica	Walter S. Johnson	Atlantic Richfield	Exxon	Hilton	Mervyn's	Skaggs
1973-74									
1974-75									
1975-76									
1976-77									
1977-78		5,000							
1978-79									
1979-80	146,339								
1980-81	194,856								
1981-82									
1982-83									
1983-84	69,000		150,000	30,000	50,000				
1984-85				60,500				10,000	
1985-86							50,000		10,600
1986-87						20,000			
1987-88						20,000			

(4) Local Site Support. Total Financial Support for the 1987-88 Academic Year.

From NWP lead agency	$ 63,190
From local host universities and colleges	$2,195,439
From local schools, districts, education agencies	$2,208,343
From states and state agencies	$1,816,357
From extramural grants	$ 713,298
From NWP Sponsorship Campaign	$ 53,938
Other	$ 215,980
Total Annual Support	$7,266,545

(5) NATIONAL WRITING PROJECT NETWORK OF SITES

(157 Sites: 143 sites in 44 states, plus 14 sites outside the U.S.)

ALABAMA

Jacksonville State University Writing Project (Jacksonville State University, Jacksonville)

Lisa Williams, Director
Department of English
Jacksonville State University
Jacksonville, Alabama 36265
(205) 231-5781 xt. 4861

The Sun Belt Writing Project (Auburn University, Auburn)

Richard Graves, Director
Isabel Thompson and Peggy Swoger, Co-Directors
Auburn University
Auburn, Alabama 36849
(205) 844-6889

Wiregrass Writing Project (Troy State University, Troy)

Betsy Dismukes, Director
Ruth M. Hooks, Assoc. Director
207 McCartha Hall
Troy State University
Troy, Alabama 36082
(205) 566-3000, ext. 494

Samford University Writing Project (Samford University, Birmingham)

David Roberts, Director
University Writing Program
English Department
Samford University
Birmingham, AL 35229
(205) 870-2964

ALASKA

Alaska State Writing Consortium (Alaska School Districts in cooperation with Alaska Dept. of Educ. and University of Alaska, statewide system)	Annie Calkins, Director Alaska Department of Education State Office Building Pouch F Juneau, Alaska 99811-0500 (907) 465-2841

ARIZONA

Greater Phoenix Area Writing Project (Arizona State University, Tempe)	Robert Shafer, G. Lynn Nelson, Marybeth Mason, Co-Directors Department of English Arizona State University Tempe, Arizona 85287 (602) 965-3105
Northern Arizona Writing Project (Northern Arizona University, Flagstaff)	Suzanne Bratcher, Director Vaughn Delp, Beth Stroble, Co-Director English Department, Box 6032 Northern Arizona University Flagstaff, Arizona 86011 (602) 523-6279
Southern Arizona Writing Project (University of Arizona, Tucson)	Dennis Evans, Director Modern Language Building Room 286 University of Arizona Tucson, Arizona 85721 (602) 621-7409 or 5423

CALIFORNIA

California Writing Project Network (University of California at Berkeley)	James Gray, Director School of Education 5627 Tolman Hall University of California Berkeley, CA 94720 (415) 642-0963
Redwood Writing Project (Humboldt State University, Arcata)	Tom Gage, Director Susan Bennett, Co-Director Anne Coffer, Coordinator English Department Humboldt State University Arcata, CA 95521 (707) 826-3161

Kern/Eastern Sierra Writing Project (CSU-Bakersfield)

Ernest Page, Director
Beverly Banks, Bob Laramee, Co-Directors
School of Education
California State University
9001 Stockdale Highway
Bakersfield, CA 93311-1099
(805) 664-2379

Bay Area Writing Project (University of California at Berkeley)

Mary Ann Smith, Director
Laury Fischer, Carol Tateishi, Co-Directors
School of Education
5627 Tolman Hall
University of California
Berkeley, CA 94720
(415) 642-0963

Northern California Writing Project (CSU-Chico)

Tom Fox and Louise Jensen, Directors
Darryl Eisele, Co-Director
Department of English
California State Universtiy
Chico, CA 95929
(916) 895-5840

Area 3 Writing Project (University of California, Davis)

Laura Stokes, Director
University-School Programs
University of California
Davis, CA 97616
(916) 752-8394

San Joaquin Valley Writing Project (CSU-Fresno)

James Frey, Co-Director
H. Ray McKnight, Co-Director
Pauline Sahakian, Assoc. Dir.
Department of English
California State University
Fresno, CA 93740
(209) 294-2588 (Frey)
(209) 294-4923 (McKnight)

UCI Writing Project (University of California, Irvine)

Carol Booth Olson, Co-Director
Owen Thomas, Co-Director
Office of Teacher Education
University of California
Irvine, CA 92717
(714) 856-5922

Cal-State Long Beach Writing Project (CSU-Long Beach)

James Day, Director
Don Hohl, Co-Director
Ron Strahl, Co-Director
California State University
1250 Bellflower Blvd.
Long Beach, CA 90840
(213) 985-7929

UCLA/California Writing Project (University of California, Los Angeles)	Rae Jeane Williams, and Faye Peitzman, Co-Directors Gayley Center, Suite 304 University of California Los Angeles, CA 90024 (213) 825-2531
USC/California Writing Project (University of Southern California)	Betty Bamberg, Acting Director Peggy Just and Bill Saunders Co-Directors Freshman Comp. Prog., HSS 200 Univ. of Southern California Los Angeles, CA 90089-0062 (213) 743-4942
Great Valley Writing Project (Stanislaus County Department of Education, Modesto)	Sharon Shanahan, Co-Director Ken Williams, Co-Director Stanislaus County Department of Education 801 County Center #3 Court Modesto, CA 95355 (209) 525-6605
Northridge Writing Project (CSU-Northridge)	Richard Lid, Co-Director Bonnie Ericson, Co-Director Department of English California State University Sierra Tower 702 18111 Nordhoff Northridge, CA 91330 (818) 885-3893
Inland Area Writing Project (Univ. of California, Riverside and CSU-San Bernardino)	Sue Teele, Director University Extension H-101 Bannockburn University of California Riverside, CA 92521 (714) 787-4361
San Diego Area Writing Project (University of California, San Diego)	Robert Infantino, Co-Director Charles Cooper, Co-Director Anne von der Mehden, Co-Dir. D-009-D Univ. of California, San Diego La Jolla, CA 92093-0509 (619) 534-2576

San Jose Area Writing Project
(CSU-San Jose)

Jonathan Lovell, Co-Director
Charleen Delfino, Co-Director
English Department
San Jose State University
San Jose, CA 95192
(408) 924-4437

Central Coast Writing Project
(Cal Poly, San Luis Obispo)

Carl Brown, Director
CeCe Skala, Co-Director
English Department
California Polytechnical
State University
San Luis Obispo, CA 93407
(805) 756-2400

South Coast Writing Project
(Univ. of Calif., Santa Barbara)

Sheridan Blau, Director
Angus Dunstan, Stephen Marcus, Co-Directors
Graduate School of Education
University of California
Santa Barbara, CA 93106
(805) 961-4422

Central California Writing Project
(Univ. of Calif., Santa Cruz)

Donald Rothman, Director
Harry Card, Co-Director
Oakes College
University of California
Santa Cruz, CA 95064
(408) 459-4047

COLORADO

Colorado Writing Project
(Colorado Dept. of Education and
Univ. of Colorado, Boulder)

Judith Gilbert, Director
Colorado Dept. of Education
201 E. Colfax
Denver, Colorado 80203
(303) 866-6761

CONNECTICUT

Connecticut Writing Project
(Univ. of Connecticut, Storrs)

Mary Mackley, Director
Kimberly Jackson, Assoc. Dir.
Department of English (U-25A)
337 Mansfield Road, Room 345
University of Connecticut
Storrs, Connecticut 06269-1025
(203) 486-2328 or 5772

Connecticut Writing Project/ Fairfield County
Faye Gage, Director
Library Bldg., Room B20
Schofieldtown Road
Stamford, Connecticut 06903
(203) 968-2213

FLORIDA

Florida Writing Project
(University of Florida, Gainesville)

Margaret Early, Director
Stephanie McGraw, Co-Director
258 Norman Hall
University of Florida
Gainesville, FL 32611
(904) 392-9191

North Florida Writing Project
(Florida State University and Leon County Schools)

J. Carol Sanfilippo, Director
John Simmons, Co-Director
205N Stone Building
Florida State University
Tallahassee, Florida 32306
(904) 644-6553

GEORGIA

Georgia Mountains Writing Project (North Georgia College, Dahlonega)

Mary Ruth Miller, Director
Nell Hallford, Co-Director
English Department
North Georgia College
Dahlonega, GA 30597
(404) 864-3391, ext. 293

Southwest Georgia Writing Project (Georgia Southwestern College)

Ondee Ravan, Director
Pat Turner, Co-Director
Georgia Southwestern College
Americus, GA 31709
(912) 928-1248

HAWAII

Hawaii Writing Project
(Univ. of Hawaii, Honolulu)

Joy Marsella, Director
Ann Bayer, Co-Director
Department of English
617 Kuykendall Hall
1733 Donaghho Road
University of Hawaii
Honolulu, HI 96822
(808) 948-6660

IDAHO

Northwest Inland Writing Project (University of Idaho, Moscow, Washington State Univ., Pullman)

Elinor Michel, Co-Director
Tom Barton, Co-Director
Sherry Vaughan, Assoc. Director
College of Education
Division of Teacher Education
University of Idaho
Moscow, Idaho 83843
(802) 885-6586

Idaho Writing Project (Idaho State Univ., Pocatello)

Kathleen King, Director
John Kijinski, Co-Director
Department of English & Philosophy
Box 8286
Idaho State University
Pocatello, Idaho 83209
(208) 236-2470

ILLINOIS

Chicago Area Writing Project (National College of Education, Evanston)

Betty Jane Wagner, Director
Marilyn Hollman, Charlotte Willour,
Co-Directors
National College of Education
English Department
2840 Sheridan Road
Evanston, IL 60201-1796
(312) 256-5150, ext. 2577

Illinois Writing Project (Roosevelt University, Chicago)

Steven Zemelman, Harvey Daniels,
Co-Directors
College of Continuing Education
Roosevelt University
430 S. Michigan Avenue
Chicago, IL 60605
(312) 341-3860

Mississippi Valley Writing Project (Southern Illinois University, Edwardsville)

Lela Detoye, Director
George Shea, Co-Director
Department of Curriculum & Instruction
Box 1122
Southern Illinois University
Edwardsville, IL 62026

INDIANA

Indiana Writing Project (Ball State University, Muncie)

Paul Ranieri, Forrest Houlette,
Co-Directors
Department of English
Ball State University
Muncie, Indiana 47306
(317) 285-8413

KENTUCKY

Bluegrass Writing Project
(University of Kentucky)

George Newell, Director
Phyllis Macadam, Co-Director
Dept. of Curriculum & Instruction
University of Kentucky
Lexington, Kentucky 40506
(606) 257-3158

Eastern Kentucky University Writing Project (Eastern Kentucky Univ., Richmond)

Charles Whitaker, Director
Alan Hunt, Shirley Byrne,
Co-Directors
Wallace 217
Eastern Kentucky University
Richmond, Kentucky 40475
(606) 622-2093

Louisville Writing Project
(University of Louisville)

Marjorie M. Kaiser, Director
Carol Hall, Assoc. Directors
School of Education
University of Louisville
Louisville, Kentucky 40292
(502) 588-6591

Morehead State University Writing Project (Morehead State University)

Gene Young and Joy Gooding, Directors
Morehead State University
UPO 931
Morehead, Kentucky 40351
(606) 783-2201

Northern Kentucky Writing Project (Northern Kentucky University, Highland Heights)

David Bishop, Patricia Murray,
Co-Directors
Education Department
276 B.E.P. Center
Northern Kentucky University
Highland Heights, Kentucky 41076
(606) 572-5624

Purchase Area Writing Project (Murray State Univ.)

Fred Cornelius, Doris Cella,
Co-Directors
English Department
Murray State University
Murray, Kentucky 42071
(502) 762-4718

Western Kentucky University Writing Project (Western Kentucky University)

Gretchen Niva, John Hagaman,
Co-Directors
English Department
Cherry Hall
Western Kentucky University
Bowling Green, Kentucky 42101
(502) 745-3043

LOUISIANA

Greater New Orleans Writing Project (University of New Orleans-Lakefront)	James Knudsen, and Joanna Leake, Co-Directors Department of English University of New Orleans, Lakefront New Orleans, Louisiana 70148 (504) 286-7248
Louisiana State University Writing Project (Louisiana State University, Baton Rouge)	David A. England, Director Faye Hutchinson, Evelyn Alford, Bill Salmi, Co-Directors 223 Peabody Hall Louisiana State University Baton Rouge, Louisiana 70803 (504) 388-2448
USL/Lafayette Writing Project (University of Southwestern Louisiana)	Ann B. Dobie, Director Carolyn Levy, Co-Director Department of English University of Southwestern Louisiana Lafayette, LA 70504-469 (318) 231-5460

MAINE

Southern Maine Writing Project (University of Southern Maine, Gorham)	George Lyons, Director Phillip Rutherford, Co-Director 305 Bailey Hall University of Southern Maine Gorham, Maine 04038 (207) 780-5326

MARYLAND

Maryland Writing Project (Towson State University, Baltimore)	C. Keith Martin,Libby Bratton, and Elyse Eidman-Aadahl, Directors Hawkins Hall, Room 301 Towson State University Towson, Maryland 21204 (301) 830-2432/3593

MASSACHUSETTS

Boston Writing Project (University of Massachusetts, Boston)	Joseph Check, Denise Burden, Peter Golden, Co-Directors Institute for Learning and Teaching University of Massachusetts/Boston Dorchester, MA 02125 (617) 929-8564

MICHIGAN

Eastern Michigan University Writing Project (Eastern Michigan University and the Ann Arbor Public Schools, Ypsilanti)	Russell R. Larson, Director Nancy Vogt, Co-Director Department of English Eastern Michigan University Ypsilanti, Michigan 48197 (313) 487-0153
Michigan State University Writing Project (Michigan State University, East Lansing)	Stephen Tchudi, Director Morrill Hall Department of English Michigan State University East Lansing, Michigan 48824-1036 (517) 353-6657
National Writing Project: Metro-Detroit (Wayne State University and the Detroit Public Schools)	Ronald Kar, Director Freddie Carter, Joann L. Elliott, Phoebe Mainster, Co-Directors Room 922 Schools Center Building 5057 Woodward Avenue Detroit, Michigan 48202 (313) 494-1603
The Oakland Writing Project (Oakland Schools in cooperation with Oakland University, Pontiac)	Aaron Stander, Director 2800 Pontiac Lake Road Pontiac, Michigan 48054 (313) 858-1989

MINNESOTA

Great River Writing Project (Winona State University, Winona, University of Wisconsin, LaCrosse)	Sandra Bennett, Sonja Schrag, Co-Directors English Department Winona State University Winona, Minnesota 55987 (507) 457-5445
Northern Minnesota Area Writing Project (St. Olaf College, Northfield)	Linda Hunt[illegible] Director Kathy Do[illegible] Susan Hawkinson, Co-Directors Academic Support Center P.O. Box 1465 St. Olaf College Northfield, Minnesota 55057 (507) 663-3288

MISSISSIPPI

Alcorn State University Writing Project (Alcorn State University)	Michael Willey, Director Shirley Cruel, Co-Director Harmon Hall 103 Alcorn State University Lorman, MS 39096 (601) 877-6403
Delta Area Writing Project (Delta State University, Cleveland)	Daniel McQuagge, Director Barbara McCormick, Co-Director English Department Delta State University Cleveland, Mississippi 38733 (601) 846-4075
Jackson State University Writing Project (Jackson State University)	B. Marie O'Banner-Jackson, Director Anne J. Cistrunk, Mary Reeves, Co-Directors Department of English and Modern Foreign Languages Jackson State University Jackson, MS 39217 (601) 968-2354
Mississippi State University Writing/Thinking Project (Mississippi State University)	Sandra Burkett, Director Mississippi State University Mississippi State, Mississippi 39762 (601) 325-7777
Mississippi Valley State University Writing Project (Mississippi Valley State University)	Marla L. Cowie, Director W. Patrick Riley, Admin. Director English Department Mississippi Valley State University Itta Bena, MS 38941 (601) 254-9041 xt 6336
South Mississippi Writing Project (University of South Mississippi)	Jeanne Ezell, Director Department of English Southern Station Box 10021 University of South Mississippi Hattiesburg, MS 39406-10021 (601) 266-5066
University of Mississippi Writing Project (University of Mississippi-Oxford Campus)	Ben McClelland, Director English Department University of Mississippi University, Mississippi 38677 (601) 232-7679

MISSOURI

Gateway Writing Project
(University of Missouri,
St. Louis, Harris-Stowe State
College)

Jane Zeni, Director
Michael Lowenstein, Co-Director
English Department
University of Missouri - St. Louis
St. Louis, Missouri 63121
(314) 553-5541

Greater Kansas City Writing Project (University of Missouri,
Kansas City/Independence Public
Schools)

Nancy Myers, Richard Luckert,
Directors
English Department
106 Cookefair Hall
University of Missouri
Kansas City, Missouri 64110-2499
(816) 276-2557

Missouri Writing Project
(University of Missouri, Columbia)

Ben Nelms, Director
216 Education Building
University of Missouri
Columbia, Missouri 65211
(314) 882-4768

Southeast Missouri Writing Project
(Southeast Missouri State University)

Dale Haskell, Director
Christine Warren, Co-Director
Southeast Missouri State University
1 University Plaza
Cape Girardeau, MO 63701
(314) 651-2629

Southwest Missouri Writing Project (Southwestern Missouri
State University)

Anita Guynn, Director
Carolyn Hembree, Co-Director
Southwestern Missouri State
University
901 S. National
Springfield, Missouri 65804
(417) 836-4891

The Writing Project at St. Joseph (Missouri Western
State College)

Karen Fulton, Director
Tom Pankiewicz, Co-Director
Missouri Western State College
4525 Down Drive
Saint Joseph, Missouri 64507-2294
(816) 271-4316

MONTANA

Montana Writing Project
(University of Montana,
Missoula)

Dick Adler, Beverly Chin
Co-Directors
Department of English
University of Montana
Missoula, Montana 59812
(406) 243-5231

NEBRASKA

Nebraska Writing Project-Chadron (Chadron State College, University of Nebraska, Lincoln)

Robert Doxtater, Director
Department of English
Chadron State College
Chadron, Nebraska 69337
(308) 432-6308

Nebraska Writing Project (University of Nebraska, Lincoln and the Nebraska State Dept. of Education)

Gerry Brookes, Director
Department of English
Andrews Hall
University of Nebraska
Lincoln, Nebraska 68588-0333
(402) 472-1816

NEVADA

Northern Nevada Writing Project (Washoe County Washoe County School District, Reno)

Denise Gallues, Director
Tamara Durbin, Co-Director
c/o Edward C. Reed High School
1350 Baring Blvd.
Sparks, Nevada 89434
(702) 359-7600 xt 259

Southern Nevada Writing Project (University of Nevada, Las Vegas)

Leon Coburn, Director
Sandra Mullaly, Susan Mitchell, Co-Directors
Department of English
University of Nevada
4505 S. Maryland Parkway
Las Vegas, Nevada 89154
(702) 739-3165

NEW JERSEY

New Jersey Writing Project (Rutgers University, New Brunswick)

Janet Emig, Director
Linda Waitkus Halstead, Co-Director
Graduate School of Education
Seminary Place
Rutgers University
New Brunswick, New Jersey 08803
(201) 932-7937

NEW MEXICO

New Mexico State Writing Project (New Mexico State University, Las Cruces)

Bill Bridges, Director
Chris Burnham, Co-Director
Department of English
Box 3-E
New Mexico State University
Las Cruces, New Mexico 88003
(805) 646-3931

NEW YORK

Capital District Writing Project (State University of New York, Albany, Albany-Schoharie-Schenectady Board of Cooperative Educational Services)	Lil Brannon, Director Doris M. Quick, Co-Director Department of English SUNY-Albany 1400 Washington Avenue Albany, New York 12222 (518) 442-4061
Long Island Writing Project (Board of Cooperative Educational Services/Suffolk Oakdale)	Miriam Baker, Director English Department Dowling College Oakdale, New York 11769 (516) 589-6100 xt. 246
New York City Writing Project (Lehman College, CUNY-Bronx)	Carla Asher and Richard Sterling, Directors Lehman College - CUNY Bedford Park Blvd. Bronx, New York 10468 (212) 960-8758
New York/Bay Area Writing Project (Board of Cooperative Educational Services/Pace College, Yorktown Heights)	William Grogan, Director BOCES Putnam/Northern Westchester Education Center Yorktown Heights, New York 10598 (914) 245-2700
Western New York Writing Project (Canisius College, Buffalo)	David Lauerman, Director Delia McAuliffe, Co-Director Thomas Fitzsimons, Assoc. Director Canisius College 2001 Main Street Buffalo, New York 14208 (716) 888-2267

NORTH CAROLINA

North Carolina Writing Project State Network	Joseph Milner, Director Department of Education P.O. Box 7266 Wake Forest University Winston Salem, NC 27109 (919) 761-5342

Appalachian Writing Project (Appalachian State University, State Department of Education, Boone)	Emory Maiden, Betty McFarland Co-Directors Department of English Appalachian State University Boone, NC 28608 (704) 262-2320
Cape Fear Writing Project (University of North Carolina, Wilmington)	Christopher Gould, Agnes McDonald, Directors Ellen Huntley-Johnston, Co-Director Department of English UNC-Wilmington 601 South College Road Wilmington, NC 28403 (919) 395-3324
Capital Area Writing Project (North Carolina State University, Raleigh)	Ruie Pritchard, Sally Buckner, Co-Directors Box 7801 North Carolina State University Raleigh, NC 27695-7801 (919) 737-3221
Coastal Plains Writing Project (Atlantic Christian College, East Carolina Univ., Greenville)	Patrick Bizzaro, JoAnna Mink, Co-Directors Department of English East Carolina University Greenville, NC 27858 (919) 757-6575
Mountain Area Writing Project (Western Carolina University, University of North Carolina at Asheville, Cullowhee)	James Nicholl, Deborah James, Co-Directors Department of English Western Carolina University Cullowhee, NC 28723 (704) 227-7264
North Carolina Writing Project-Wake Forest (Wake Forest State Univ., Winston-Salem State University)	James Dervin, Director Winston-Salem University P.O. Box 13158 Winston Salem, NC 27110 (919) 750-2300
Pembroke State University Writing Project (Pembroke State University, North Carolina State Board of Education)	K. Sullivan, B. Stewart, Co-Directors Box 50 Pembroke, NC 28372
UNC/Charlotte Writing Project (University of North Carolina, Charlotte)	Leon Gatlin, Director Department of English 213 Garinger University of North Carolina Charlotte, NC 28223 (704) 547-2296

NORTH DAKOTA

Northern Plains Writing Project (Minot State University, Minot)

Harold Nelson, Director
English Department, Box 71
Minot State University
Minot, North Dakota 58701
(701) 857-3183

OHIO

Ohio Writing Project
(Miami University, Oxford)

Max Morenburg, Mary Fuller,
Co-Directors
Department of English
261 Bachelor Hall
Miami University
Oxford, Ohio 45056
(513) 529-1393

Toledo Area Writing Project
(The University of Toledo)

Mary Jo Henning, Director
Carol Doherty, Co-Director
College of Education and
Allied Professions
The University of Toledo
Toledo, Ohio 43606
(419) 537-2471

OKLAHOMA

Oklahoma Writing Project
(University of Oklahoma, Norman, Oklahoma State Department of Education, Oklahoma City)

Michael Angelotti, Director
Claudette Goss, Asst. Director
Instructional Leadership
University of Oklahoma
Norman, Oklahoma 73019
(405) 325-1538

OREGON

Oregon Writing Project at Southern Oregon State College
(SOSC, Ashland)

Pat Wixon, Director
Grant Pine, Vera Mahanay,
Co-Directors
126 Church Street
Ashland, Oregon 97520
(503) 482-8771

Oregon Writing Project at the University of Oregon
(University of Oregon, Eugene)

Nathaniel Teich, Director
Vince Wixon, Co-Director
Department of English
University of Oregon
Eugene, Oregon 97403
(503) 686-3911

Oregon Writing Project at Lewis and Clark College) (Lewis and Clark College-Portland)	Kim Stafford, Director Northwest Writing Institute Campus Box 100 Lewis and Clark College Portland, Oregon 97219 (503) 293-2757

PENNSYLVANIA

Capital Area Writing Project (Pennsylvania State University at Harrisburg, Middletown)	Donald Wolff, Director Humanities Division Penn State Harrisburg Middletown, Pennsylvania 17057 (717) 948-62191
Northeastern Pennsylvania Writing Project (King's College and Wilkes College)	Patricia Heaman, Director John Ennis, Mary Hart, Thomas Smith, Co-Directors Wilkes College Wilkes-Barre PA 18766 (717) 824-4651 ext. 4538
Northwestern Pennsylvania Writing Project (Gannon University, Erie)	Sally LeVan, Director Michael Tkach, Co-Director Gannon University Erie, Pennsylvania 16541 (814) 871-7748
Pennsylvania Writing Project (West Chester University, West Chester)	Robert Weiss, Director Jolene Borgese, Co-Director 210 Philips Building West Chester University West Chester, Pennsylvania 19383 (215) 436-2281
Philadelphia Writing Project (University of Pennsylvania, Philadelphia)	Susan Lytle, Director Graduate School of Education 3700 Walnut Street University of Pennsylvania Philadelphia, Pennsylvania 19104 (215) 898-8398
Western Pennsylvania Writing Project (University of Pittsburgh, Pittsburgh)	Nick Coles, Director Linda Jordan, Co-Director University of Pittsburgh 526 Cathedral of Learning Pittsburgh, Pennsylvania 15260 (412) 624-6557

Lehigh Valley Writing Project (Penn State, Allentown Campus, Fogelsville)	Dr. Margaret M. Cote, Director Department of English Penn State, Allentown Campus Fogelsville, PA 18051 (215) 285-4811

RHODE ISLAND

Rhode Island Consortium on Writing (Rhode Island College, University of Rhode Island, Brown University, and the Rhode Island Dept. of Educ.)	Mary McGann, Director English Department Rhode Island College Providence, Rhode Island 02908 (401) 456-8141

SOUTH CAROLINA

South Carolina Writing Project State Network	Kemble Oliver, Director State Department of Education 808 Rutledge Building Columbia, South Carolina 29201 (803) 734-8355
Charleston Area Writing Project (Charleston County Schools, The College of Charleston)	Beverly Varnado, Kathy Haney, Co-Directors Charleston County School District Division of Curriculum and Instruction 3 Chisolm Street Charleston, South Carolina 29401 (803) 722-8461
Clemson Writing Project (Clemson University, Clemson)	Donna Winchell, Director Kathy Neal, Co-Director Department of English Clemson University Clemson, South Carolina 29634-1503 (803) 656-5390/3151
Coastal Area Writing Project (University of South Carolina, Coastal Carolina College, Horry County Commission of Higher Education)	Jacqueline Gmuca, Director Coastal Carolina College P.O. Box 1954 Conway, South Carolina 29526 (803) 448-1481 Ext. 2418
CYLUC-Winthrop Writing Project (Winthrop College, Winthrop)	Joye Berman, Nell Braswell Co-Directors Penny Coppedge, Sandra Hannon, Assistant Directors Winthrop College School of Education Withers Building Rock Hill, South Carolina 29733 (803) 323-2171

Lander Writing Project
(Lander College, Greenwood)

Michael Ward, Director
Lander College
Greenwood, South Carolina 29646
(803) 229-8265

Midlands Writing Project
(University of South Carolina, Lexington, Two District Education Center, Richland School District One, Columbia)

Beverly Busching, Director
Linda Kirszenbaum, Curt Elliot,
Harriet Williams, Co-Directors
College of Education
University of South Carolina
Columbia, South Carolina 29208
(803) 777-6232

Santee-Wateree Writing
(USC-Sumter)

Rachel Bickley, Lee Craig,
Suzanne Wates, Co-Directors
Sumter District Two
1345 Wilson Hall Road
Sumter, South Carolina 29150
(803) 775-6341

Spartanburg Writing Project
(Spartanburg County School District I-VII, University of South Carolina - Spartanburg, Spartanburg County Foundation)

Judy Prince, Director
Lynn Harrill, Ed Epps, Doris Hughey,
Brenda Davenport, Dwight Lambert,
Co-Directors
USC Spartanburg
Spartanburg, South Carolina 29303
(803) 439-6326

SOUTH DAKOTA

Dakota Writing Project
(Univ. of South Dakota, Vermillion)

Nancy Zuercher, Director
Department of English
University of South Dakota
414 E. Clark
Vermillion, SD 57069
(605) 677-5229

TENNESSEE

Greater Memphis Writing Project (Memphis State University)

William DeLoach, Director
Kenneth Rainey, Co-Director
Department of English
Memphis State University
Memphis, Tennessee 38152
(901) 454-2652

TEXAS

Alamo Area Writing Project
(Trinity University, San Antonio)

Victoria Aarons, Director
Trinity University
715 Stadium Drive
San Antonio, Texas 78284
(512) 736-7574

Caprock Area Writing Project
(Texas Tech University)

Shirley Koeller, Director
Jean Wills, Virginia Yarbrough,
Jane Buchanan, Co-Directors
College of Education, P.O. Box 4560
Texas Tech University
Lubbock, Texas 79409
(806) 742-2368

East Texas Writing Project
(East Texas State University,
Texarkana)

Doris Davis, Director
Dot Carmichael, Karen Hundley,
Co-Directors
English Department
P.O. Box 5518
East Texas State University
Texarkana, Texas 75501
(214) 838-6514

Greater Houston Area Writing Project (University of Houston-Clear Lake)

Doris Prater, Director
Barbara Samuels, Suzanne Sutherland,
Co-Directors
University of Houston - Clear Lake
2700 Bay Area Boulevard
P.O. Box 324
Houston, TX 77058
(713) 488-9160

Keystone Writing Project
(Fort Worth Independent
School District)

Sally Hampton, Director
3320 West Cantey
Alice Carlson Bldg.
Fort Worth, Texas 76109
(817) 921-0153

Northeast Texas Writing Project (East Texas State
University, Commerce)

Marilyn Flinn, Director
Region 10 Education Service Center
P.O. Box 831300
Richardson, Texas 75083-1300
(214) 231-6301 xt 410

West Texas Writing Project
(University of Texas at El Paso)

G. Douglas Meyers, Director
Patricia Withers, Co-Director
Department of English
University of Texas at El Paso
El Paso, Texas 79968-0526
(915) 747-5647/5731

UTAH

Utah Writing Project
(Utah State University, Logan)

William Strong, Director
Richard Harmston,Co-Director
Secondary Education-UMC 2815
Utah State University
Logan Utah 84322
(801) 750-2228

VIRGINIA

Capital Writing Project
(Virginia Commonwealth University, Richmond)

Leila Christenbury, Director
Bill Smith, Co-Director
Teacher Education, Box 2020
Virginia Commonwealth University
Richmond, Virginia 23284
(804) 367-1324

Central Virginia Writing Project
(University of Virginia, Charleston)

Joseph Strzepek, Director
Richard Harrington, Carol Pope,
Margo Figgins, Co-Directors
Curry School of Education, Room 244
University of Virginia
405 Emmet Street
Charlottesville, Virginia 22903
(804) 924-0842

Eastern Virginia Writing Project
(College of William and Mary, Williamsburg)

Mark G. Gulesian, Director
School of Education
College of William and Mary
Williamsburg, Virginia 23185
(804) 253-4607

Northern Virginia Writing Project
(George Mason University, Northern Virginia Community College, Public and Private Schools of Northern Virginia)

Donald Gallehr, Director
Marian Mohr, Co-Director
Department of English
George Mason University
4400 University Drive
Fairfax, Virginia 22030
(703) 323-2217

Southside Virginia Writing Project
(Virginia State University)

Bertie Powell, Director
Peggy Delbridge, Co-Director
Virginia State University
Box 486
Petersburg, Virginia 23803
(804) 520-5489

Southwest Virginia Writing Project
(Virginia Polytechnical Institute and State University, Blacksburg)

Patricia Kelly, Director
Warren Self, Co-Director
Department of Education
309 War Memorial Hall
Virginia Polytechnical Institute
Blacksburg, Virginia 24061
(703) 961-5537

Tidewater Writing Project
(Old Dominion University, Norfolk)

Denny T. Wolfe, Director
Ben Brunwin, Co-Director
Dept. of Curriculum and Instruction
Old Dominion University
Norfolk, Virginia 23529-0161
(804) 440-3230

WASHINGTON

Northwest Inland Writing Project
(University of Idaho, Moscow, Washington State University)

Tom Barton, Co-Director (WSU)
Elinor Michel, Co-Director (UI)
English Department
Washington State University
Pullman, Washington 99164
(509) 335-3581

Puget Sound Writing Program
(University of Washington, Seattle

Linda Clifton, Director
English Department, GN-30
University of Washington
Seattle, WA 98195
(206) 543-0141

WEST VIRGINIA

The Marshall Writing Project
(Marshall University)

John McKernan, Director
Department of English
Marshall University
Huntington, West Virginia 25701
(304) 696-6668

West Virginia Writing Project
(University of West Virginia College of Graduate Studies, Institute)

Fran Simone, Director
University of West Virginia
College of Graduate Studies
Institute, West Virginia 25112
(304) 766-1984

West Virginia Writing Project-WVU
(West Virginia University)

Margaret Racin, Director
W. Michael Reed, Co-Director
English Department
Stansbury Hall
West Virginia University
Morgantown, WV 26506
(304) 293-3107

WISCONSIN

Central Wisconsin Writing Project
(University of Wisconsin, Stevens Point)

Richard Behm, Director
Academic Achievement Center
018 LRC
University of Wisconsin
Stevens Point, Wisconsin 54481
(715) 346-3528

Fox Valley Writing Project
(University of Wisconsin, Oshkosh)

Shirley Rogers, Director
Jean Erdman, Co-Director
C.O.E.H.S.
University of Wisconsin
Oshkosh, Wisconsin 54901
(414) 424-2262

Great River Writing Project
(University of Wisconsin, LaCrosse,
Winona State University, Winona)

Sonja Schrag, Sandra Bennet, Directors
English Department
University of Wisconsin
LaCrosse, Wisconsin 54601
(608) 785-8660

Milwaukee Area Writing Project
(Carroll College, Waukesha)

James Vopat, Director
English Department
Carroll College
Waukesha, Wisconsin 53186
(414) 547-1211

West Central Wisconsin Writing Project (University of Wisconsin,
Eau Claire)

Rhoda Maxwell, Director
Department of English
University of Wisconsin
Eau Claire, Wisconsin 54701
(715) 836-2323

Wisconsin Writing Project
(University of Wisconsin, Madison)

John Kean, Director
556C Teacher Education Bldg.
University of Wisconsin
225 N. Mills Street
Madison, Wisconsin 53706
(608) 263-6001

WYOMING

Wyoming Writing Project
(University of Wyoming, Wyoming
State Department of Education,
School Districts of Albany, Campbell,
and Sweetwater Counties)

John Warnock, Director
Susan Holt, Tilly Warnock, Co-Directors
Department of English, Hoyt Hall
University of Wyoming
Laramie, Wyoming 82071
(307) 766-2373

INTERNATIONAL AFFILIATES

ASIA

East Asia Writing Project (East Asia Regional Council of Overseas Schools)	Susan Rinker, Director Wendy Strachan, Liaison Director Taipei American School 731 Wen Lin Road, Sec. 1 Republic of China

AUSTRALIA

Queensland Writing Project	K. Albion Carseldine Campus, B.C.A.E. P.O. Box 284, Sillmere Queensland 4034 Australia

CANADA

Calgary Writing Project (University of Calgary, the Calgary Board of Education and the Ranaghan Foundation)	William Washburn, Director Richard Adler, Co-Director 2519 Richmond Road SW Calgary, Alberta Canada T3E 4M2

EUROPE

Department of Defense Dependents Schools--Europe, Atlantic Region, Pacific Region and Washington Writing Project	Joan Gibbons, Director English Languge Arts DOD-ODS Hoffman Building I, Room 172 Alexandria, Virginia 22331 (202) 325-7810
Department of Defense Dependents Schools--Europe, Germany Region Writing Project	Betty Nicholas, Co-Director Robert N. Bureker, Co-Director Education Division Germany Region APO New York 09633

GREAT BRITAIN

Learning About Learning Project (Local Educational Authorities - Wiltshire, Somerset, Oxfordshire W. Sussex)	Pat D'Arcy, Director Gordon Mason, Paul Baker, Co-Directors Kings Walk Malmesbury, Wiltshire England

GREECE

The Athens Writing Project
(American Community School of Athens)

Wendy Strachan, Director
575 East Kings Road
North Vancouver
British Columbia V7N 1J7
Canada
(604) 988-6500

PUERTO RICO

University of Puerto Rico/
Mayaguez Writing Project
(Univ. of Puerto Rico/Mayaguez Campus)

Francisco Betancourt, Director
Marty Martin Betancourt, Assoc. Director
Department of English
University of Puerto Rico
P.O. Box 5000
Mayaguez, PR 00709-5000
(809) 832-4040 xt 3064

SCANDINAVIA

The Nordic Writing Project

Lennart Bjork, Co-Director
English Department
University of Stockholm
Stockholm 10691
Sweden

Kent Larsson, Co-Director
Dept. of Scandinavian Languages
University of Uppsala
75323 Uppsala
Sweden

SWEDEN

The Stockholm Writing Project
(University of Stockholm)

Lennart Bjork, Director
English Department
University of Stockholm
Stockholm 10691
Sweden

The Gothenburg Writing Project

Kerstin Ekberg, Director
Gymnasieavd. Gutv
Goteborgs Skolforvaltning
S-415 40 Gothenburg
Sweden

Kerstin Palmqvist, Director
Unervisningsavd. /Byra Us
Goteborgs Skolforvaltning
S-415 40 Gothenburg
Sweden

The Swedish Writing Project

Britt-Marie Arkhammar, Director
Grahundsvagen 122
123 62 Farsta
Sweden

FINLAND

The Jyvaskyla Writing Project

Pirjo Linnakyla, Director
Auvilankuja 1 as. 7
40740 Jyvaskyla
Finland

NORWAY

The Norwegian Writing Project

Lars Sigfred Evensen,
National Coordinator
Dept. of Applied Linguistics
University of Trondheim
N-7055 Dragvoll
Norway

Coordinator, Oslo Area:
Froydis Hertzberg
Skogbrynet 17 E
0283 Oslo 2
Norway

Coordinator: Trondheim Area
Torlaug Lokensgard Hoel
Teachers' Training College
University of Trondheim
Haakon Magnussons gt. 1B
7000 Trondheim
Norway

Coordinator, S.W. Norway:
Anne Skeie
N-4140
Erjford
Norway

ATTACHMENTS

University of California, Berkeley: The Bay Area Writing Project and the National Writing Project, MLA, 1986.

National Writing Project Model and Program Design.

Statement of Barbara J. Firestone

February 26, 1990

My name is Barbara Jane Firestone, and I have been an elementary teacher for 22 years. My experience has consisted of fifth and sixth-grades. At the present time, I am teaching fifth grade at McCollom Elementary School in Wichita, Kansas.

I have also taught several semesters at The Wichita State University as an adjunct professor of a social studies methods' course. At the present time, I do not have the necessary time to devote to this class and am not teaching it.

Being able to write this to you is a real privilege. The contents of this paper, therefore, reflects my own personal observations and perhaps some of the feelings concerning education by my colleagues. Some of their views were given me when I surveyed them earlier this month. At that time, I believed that I would be providing testimony before the Senate Subcommittee on Education, Arts, and Humanities.

Many members of the school faculty responded to the question, "What would make teaching better?" This general question invited anyone who wanted to respond to do so in such a way as to let them interpret the question with a broad topic focus. Many of my own personal observations about this question were confirmed. I believe, therefore, that if this information reflects members of McCollom School's faculty as to how education and teaching could be better, that it may also be true for other school settings.

The intent of what is to follow is to provide some insight into the educational scene as I view it. It is often difficult to understand another's role without personally experiencing it. For instance, the media tries to keep the public informed on issues concerning our nation, its leaders and perhaps even identifying issues in which they believe hold public interest. Sometimes this even leads to interpretation of what is being done and affects public opinion. I feel almost certain that we, as citizens, still cannot comprehend the process in which Congress conducts business.

Nevertheless, we do try. We are far removed from the day-to-day operations of the country. While I may have opinions as to what happens--often because of the media, I am not personally aware of all of the daily operations nor do I experience first-hand this process. I, therefore, listen, read, and question what information I receive.

Similarly, I believe that education should be viewed in much the same way. While there are people willing and eager to provide legislators about the state of education, there remains those of us who feel that the true scene has not always been described accurately. This is probably not due to any deliberate attempt to distort or misinform--perhaps it is because that people view things differently particularly in regard to education, its direction, and the implementation of the direction.

I would like to share with you some things that exist in the educational framework--that should perhaps be considered, if for no other reason, but for insight and awareness purposes.

This past January, President George Bush outlined six national goals for education. This is perhaps the first time that I have heard some things in regard to education that offers some direction. I applaud his statements and believe that one comment was of particular interest to me. This comment helped me to focus on the content of this paper. Reference was made to parent responsibility. Furthermore, I also believe that more money is not the main issue.

I do not intend to dwell on those things of which most people are aware. Instead, I invite you to reflect on the following comments. I must also tell you that I am usually optimistic about education. There are others who would prefer emphasizing the negative aspects of education. So, as you consider these remarks, please be aware that I try to focus on the positive about what I observe and what things tend to interfere with the educational process.

The society of the United States is somewhat out-of-control!

*The breakdown of the family as an institution
*The drug crisis involving students and adults
*The decline of church attendance and the teaching of values
*Television programming and influence
*The role-modeling of adults in the homes and in professions
*Academic accomplishments

All of these reflect on education. Most people recognize these as being deterrents on society's activities. They serve no good purpose and interfere with people's lives and energies. The latter are misspent operations that interrupt productive problem-solving that are needed on national and international problems that are a concern for people everywhere such as food, housing, employment, the environment, and peace.

As a leader, the United States needs to regain control, to encourage citizens, and to resolve those things that have become burdensome and costly--costly in the sense of the loss of human resources. I believe that while the problems are complicated, some of the solutions may be simple or perhaps overlooked. I do believe that the problems can be solved. Their resolution require insight, leadership and more importantly, the decision and commitment to solve. Your direction and guidance are required. The schools can play a major role, but cannot carry the burden.

As educators, we tend to be given the brunt of much criticism. Many of the things that have been identified as the weaknesses of the schools are, in fact, true. The same things that are out-of-control in the schools are the same problems that are true of society. Most educators will agree that there are things that should be happening in schools but are not.

And, yet, when problems are identified or suggested by educators, the cries are not heard or result in mandates, administrative decisions, or suggestions that often compound the problems instead of their resolution.

I am glad to say that teachers are doing a marvelous job. They personally care about their students and are dedicated, well-trained, and motivated, in most instances, to do their best in the classroom. But, teachers are not miracle workers!

As briefly as possible, let me describe some things we experience and encounter:

Most teachers I surveyed in my school believe that the number of hours spent in their professional roles is overwhelming. We feel this is appropriate when the energies are properly expended. Professionally, we are involved with related activities, too. In addition to classroom preparation time, many hours are spent in meetings. On the average in my building, teachers reported an average of eighteen hours on preparation and three hours in meetings, weekly. The latter varies during some weeks. The meetings include faculty meetings, committee related to the curriculum, and informational meetings. The amount of time spent with their students are six hours daily. Even these hours vary daily because of scheduling and school activities.

Another problem is the teacher's lack of authority to execute the role of assigned responsibility.

Accountability is on a daily basis and often means that the teacher must be ready to explain class objectives, district policies, or decisions made regarding the classroom. This requires many additional hours conferencing with parents.

District tests are often duplicated in terms of objectives, requiring class time with covering the same instruction.

There is endless paper work. Due to the amount of time this requires, it cannot always be done at school. There is no time for this to be done during the school day. Planning time is utilized in teacher preparations, telephone conferencing with parents, and routine school tasks that are part of the school day.

There are too many student absences.

There is either no homework, incomplete assignments, or poor preparation.

The school curriculum extends beyond the basics. The following is but a sampling of instructional tasks or supplemental activites that are a part of the intended six-hour,teacher-pupil instructional time.

Learn Not to Burn curriculum
International Fair
Danger Stranger Program
Police Laison Program
Bike safety
A.I.D.S. Curriculum
Science Fair
Art Fair
Symphony (2 mornings a year)
Happy Healthy Kids Program
Assemblies
Constitutional Contests
World Book Reading Contest
Red Ribbon, drug-free walk
Math-a-thon
Assisting other teachers:
  computer and reading - cross grade levels

Fire Prevention assembly and activities
Fire Prevention poster contest
Geography Bee contest
Spelling Bee (Individual / All-school)
Computer
Eye screening
Ear screening
Dental check
Drugs
Music (vocal and instrumental)
Martin L. King Essay Contest
Photographs (taken twice a year)
Assemblies
Book It
PTA contests

There is absolutely nothing wrong with including all of these in the curriculum. These are important. There is an absence of time, however. The teachers manage all of the additional roles the schools have.

It takes little computing to realize that the demands on the school day are overwhelming. The curriculum with all of the media and materials available require much flexibility on the part of the teacher, a lot of patience, and management skills. Teachers do a good job with the assigned tasks.

Finally, at the elementary school level, teachers are in the business of introducing school, motivating pupil interest, and encouraging their students. Even at this young age, the problems children bring to school are many. Teachers confront on a regular basis the ills of society. It requires time to counsel children who are hungry, spend the night helping their parents deliver drugs, comfort children who have run away or have child-abused siblings, et al.

Elementary teachers are expected to initiate every life-long concept, provide an overview of education's curriculum, and begin life-long skills. This is to be done while establishing good study habits and a love for school.

Directives are often given or suggested that students not be given an unsatisfactory when the material is not mastered. There are children who have difficulty in learning and there is not help for them. They are given reports that indicate a passing grade, in many instances, or advanced a grade where their problems become worse. The number of these children we are losing are increasing becsuse there are no services for them.

As I mentioned initially, I am an optimistic person. There are those who would probably say that I have minimized or limited the problems existing in the schools--and affecting education. Regardless, the problems are real, their extremities depnding on geography, school population and the grade level.

Given that there are problems facing us--the approach to the solution is relatively simple.

Provide teachers with students who attend school regularly.

Provide teachers with students whose parents send them with expectations for learning and who are willing to support the children's learning efforts.

Provide teachers with children whose parents send them with a proper attitude for learning without making excuses for them.

Encourage parents to be school advocates.

It is time to bring society back into control. It is time to make the process of education a priority. The solution is simple. The implementation is difficult. The results, however, will be children experiencing success.

This is an exciting time to be a teacher. It is an exciting time to be a member of Congress. The challenges exist,and we have the opportunities to affect important changes.

TESTIMONY OF CRAIG J. RANCOURT
LEGISLATIVE COUNSEL OF THE
AMERICAN ASSOCIATION OF CLASSIFIED SCHOOL EMPLOYEES
BEFORE THE SUBCOMMITTEE ON
EDUCATION, ARTS AND HUMANITIES

Chairman Pell and Members of the Committee:

I am speaking to you today, on behalf of the 250,000 members of the American Association of Classified School Employees (AACSE), the nation's largest union exclusively representing classified school workers such as custodians, teacher aides, secretaries, food service personnel, library technicians, bus drivers, security and maintenance personnel in our nation's public schools. I address this committee today on behalf of our members in support Title IV of S. 1676 which would provide an opportunity for classified school workers to become school teachers.

The stated purpose of TITLE IV of the bill "to establish and operate new career programs to attract minority candidates, who are in school support or paraprofessional positions or in occupations other than teaching, to careers teaching in elementary and secondary schools", offers many dedicated classified school workers their first real opportunity to move into the teaching profession.

Many of our members have expressed the desire to work more directly with children as teachers but do not have the resources to fund the further education needed. By offering the opportunity to have a large percentage of teacher education programs take place at the classified workers' places of work and by giving academic credit for life experience and in-service training already received many classified school workers will have their first real chance at a higher education. AACSE also supports the provision which would enable those workers who have not graduated from high school to participate in local teacher education programs.

AACSE supports the bill's provision to fund teacher education programs developed by local school districts, colleges, non-profit organizations and others. By offering grants to school districts to set up teacher education programs, inner city schools, which serve a higher percentage of minority children and have a high percentage of minority classified school workers, will educate more minority teachers than traditional teacher's colleges.

AACSE also applauds the inclusion, in S. 1676, of the provision which would authorize the Department of Education to repay student loans for any person who becomes a teacher by using a Stafford Loan and who is teaching, full time, in a school district eligible for assistance under Chapter 1. This provision will go far to encourage minority classified school workers to become school teachers in the districts in which they now serve.

Finally, AACSE would like to thank Senator Pell and Senator Kennedy for introducing this important piece of legislation. We believe it will go far in providing a cadre of qualified and dedicated teachers for America's schools. On behalf of the members of the American Association of Classified School Employees, I urge this committee to send a unanimous ought to pass report to the floor of the Senate. I hope we can count on your support of S. 1676.

PREPARED STATEMENT OF THE NATIONAL EDUCATION ASSOCIATION

Mr. Chairman and Members of the Subcommittee:

The National Education Association represents 2 million professional and support employees in public elementary, secondary, vocational, and postsecondary schools throughout the nation. We appreciate the opportunity to comment on legislation to address pressing needs in teacher recruitment and professional development.

The charter of the National Education Association, adopted in 1857, dedicates the Association to elevating the character of the teaching profession and advancing the cause of public education in the United States. NEA members have pursued those twin goals for more than 130 years. The importance of those goals is clear. Next to the student, the classroom teacher is the most important element in the education process.

NEA supports federal efforts to address the pressing national teacher shortage and to help state and local education agencies assure that the skills and knowledge of classroom teachers are of the highest calibre.

We commend this Subcommittee for its attention to a broad range of needs related to the teaching profession. NEA strongly supports federal legislation that will provide resources to:

- attract qualified individuals to enter the teaching profession;

- provide incentives to new and practicing teachers to work in geographic or curriculum areas where there are personnel shortages; and

- support activities that enhance the skills and material resources of teachers, especially programs that emphasize a collaborative approach.

Teacher Shortage

A 1985 study by the Department of Education's National Center for Education Statistics revealed a widening gap between teacher supply and demand. In the fall of 1986, there were 144,000 new teachers available for 165,000 positions -- a gap was 21,000 people. In other words, new teacher graduates would be available to fill only 87 percent of the demand. NCES projected that by 1992, the gap will be 78,000, that is -- new teachers would meet only 64 the demand for additional teachers. The number of college freshmen interested in teaching declined from almost 20 percent in 1970 to less than 5 percent in 1982. There are some indications that this situation is turning around, but it is unlikely our nation will ever again have such a large pool of individuals interested in entering the teaching profession.

The teaching shortage is really three separate problems: 1) a numerical shortage of properly certificated teachers in certain geographic areas, particularly in urban and rural school districts; 2) a shortage of qualified teachers in certain academic disciplines, and 3) a shortage of minority teachers.

Math and science are two key teaching fields with shortages that have received a lot of attention in recent years. But shortages also exist in bilingual education, special education, early childhood education, foreign languages, business education, industrial arts, English, agriculture, and other areas.

Unfortunately, many school districts deal with shortages in inappropriate ways. A 1986 NEA survey of 100 urban school districts revealed that where teacher shortages occur, 38 percent of the school districts would be likely to assign teachers outside their field of preparation, 38 percent would recruit people from other fields who had not been trained as teachers, 19 percent favored eliminating or reducing some courses, 12 percent said they would be likely to increase class size, and 12 percent said they might hold split sessions. Research suggests that the practice of recruiting non-certified teachers for shortage areas is even more common for rural school districts.

At the same time, the opening of a broad range of career opportunities for minorities and women has shifted the balance in America's classrooms. Today, the proportion of Black, Hispanic, Asian, and Native American school-age children is almost 30 percent, but the percentage of teachers from these groups is about 10 percent. According to data compiled by NEA and the Office of Education Research and Improvement in the Department of Education, more than 16 percent of school children are Black, but only 7 percent of the teachers are; some 9 percent of school children are Hispanic, but less than 2 percent of the teachers are. Asian and Pacific Islanders make up 2.5 percent of the school population but only 1 percent of the teaching force. Native American children comprise 1 percent of school population but only 0.6 percent of the teaching force.

Failing to address this shortage in qualified minority teachers will have profound academic and social ramifications for the United States. According to the Carnegie Report, A Nation Prepared: Teachers for the 21st Century, "Schools form children's opinions about the larger society and their own futures. The race and background of their teachers tells them something about authority and power in contemporary America. These messages influence children's attitudes toward their school, their academic accomplishments, and their views of their own and others' intrinsic worth. The views they form in school about justice and fairness also influence their future citizenship."

Addressing the shortages of minority teachers will help reduce the dropout rate and improve the commitment minority youth have to education. In a multicultural, multiracial society such as ours, a commitment to pluralism is necessary for both equal opportunity and economic survival.

The federal government cannot reduce the teaching shortage by itself. Clearly, inadequate compensation and lack of public regard for educators are two of the prime obstacles to significant reductions in the teaching shortage. But these shortages are truly a national problem, and NEA supports legislation to provide economic incentives -- through scholarships, loan forgiveness, paid sabbaticals -- and assistance with recruitment and other outreach programs to help address these shortages.

America needs more than just millions of persons willing to teach. Certification waivers and exemptions, and other shortcuts such as alternative certification, address only the economics of supply and demand. America's schools need a strategy for reducing the teacher shortage that truly improves the quality of education consistent with national goals set by the White House and the governors. If state certification and professional standards need to be strengthened, then the Association will work with the states to strengthen them. But that must be coupled with a commitment to stringent adherence to certification requirements.

Enhanced Role of Classroom Teacher

To meet the challenges of the next century, the United States must begin to restructure schools in ways that improve basic skills and go beyond the basics to higher order thinking. There is little consensus on a single, precise model for this restructuring, but most Americans agree that the role of the teacher will be more critical than ever. As the decision-making that affects our educational system is pushed down to the classroom level, parents and public officials need even greater assurances that teachers have the background, skills, and creativity to reach each student successfully.

Proposed federal legislation to enhance opportunities for teachers to share ideas and gain new skills and information is consistent with state efforts to improve and enhance inservice education. In Washington state, for example, the legislature recently authorized funding for 10 additional days for teachers beyond the school year for planning and inservice education. Many states now require participation in inservice education as a condition of continued employment.

NEA strongly supports the concept of federal support for centers or academies which serve a school district, consortium of school districts, or a region. One of the biggest problems teachers face is isolation in the classroom. Given the tremendous demands on a teacher's time during the regular school day and beyond -- teaching, noninstructional duties, extracurricular activities, grading papers, planning, etc. -- most teachers find it almost impossible to find opportunties to do research, to develop new materials, and to gather information on effective teaching practices. And yet, a teacher's own peers are perhaps the most knowledgeable people in all of these areas. The concept of teachers helping teachers, which guided the development of Professional Development Resources Centers authorized under Title V of the Higher Education Act, is an effective approach that deserves the support of Congress.

Any final proposal for a teacher academy, teacher center, or professional development academy should take into account accessibility by teachers -- in terms of both geographic location and time; resources for staff, materials, and equipment; opportunities for interaction among teachers; and interaction with other key resource people in the community, including higher education faculty and representatives of business, the media, and public agencies.

One key focus of teacher academies should be strategies for teachers to enhance their knowledge base and learn about new developments in such areas as math, English, government, etc. But these proposed teacher academies should not be limited to curriculum alone. Much of that need can be met and is being met, to a large extent, in the postgraduate study most teachers pursue in the evenings and during the summers. What teachers need most is access to materials and skills directly related to the work they do in the classroom -- appropriate to various ages, skill levels, and learning styles -- and consistent with the curriculum requirements of the state or school district.

For example, there are ample courses in colleges of education that address general issues in classroom management. But a more productive approach would be to offer workshops on classroom management as it relates to the discipline policies of the school district in which a teacher is working. Teachers may take courses in teaching mathematics at the elementary level in a college of education, but they would benefit more from courses that consider the specific texts and materials used in the school district. This need for workshops specific to the needs of the individual teacher is particularly acute on either end of the experience scale of teachers -- new teachers in their first few years in the classroom and more experienced teachers who are looking for new approaches to revitalize their classrooms.

In addition, NEA supports federal support for pilot projects to help schools implement site-based decision-making. There is a growing consensus that decisions affecting curriculum, materials, and other critical elements of educational quality should be made at the local level. Teachers themselves, who are responsible for using those tools, should have an effective say in the selection. At the same time, teachers should have opportunities to work together to set local objectives, consistent with state and national goals, and to determine the best strategies for accomplishing those goals.

As schools begin to restructure in ways that give teachers more autonomy in the classroom and more flexibility to adapt to the needs and learning styles of individual students, the fact that teaching is truly an art, rather than a science, becomes more evident. No one can prescribe a precise formula for effective teaching. But there is much that teachers can learn from each other.

Americans are ready to move forward in efforts to make our public schools the best in the world. NEA appreciate this Subcommittee's attention to teacher recruitment and education, and we will happy to assist in any way we can.

Prepared Statement of Vernon J[illegible]son, Superintendent, Rochester Public Schools

Improving instruction in public schools is a goal supported by national mandate. To achieve this objective, there is a need to attract and retain professionally capable teachers. Addressing this need prompted the Rochester Public School District, Rochester, Minnesota to examine two related areas. The first is formalized teacher induction, and the second is career enhancement for veteran teachers.

School districts in several states have sought high-quality experienced teachers from within the ranks to provide formalized mentoring as a component of new teacher induction programs. Districts with formalized induction programs report favorable outcomes both in retaining experienced staff and in attracting new teachers.

Research on teaching and other professions generally support the concept of mentoring. Literature on the topic exposes several types of positive outcomes of mentoring activity. First, there is the direct impact of providing immediate support for the new professional. Second, the mentor or clinical supervisor, an experienced professional linked to the new teacher, is able to contribute to the professionalization of teachers which result in improved attitudes toward the profession and enthusiasm toward a professional growth dimension.

The literature exposes several types of positive outcomes of induction activity. First, there is the direct impact of providing immediate support for the new professional. Second, an experienced professional linked to the new teacher, reported significant positive rewards which centered on improved attitudes toward the profession and enthusiasm toward a professional and personal growth dimension.

Induction, as applied to the beginning teacher, "implies a planned, organized orientation procedure." (Ashburn, 1987) An expanded definition includes the introduction and installation into the teaching profession. Odell (1986) indicates, "Teacher induction programs take a variety of forms and are in place for various periods of time, but always the paramount objective of the programs is to offer assistance to the new teacher." (p.26) Quality induction programs attempt to bridge the gap between student teacher status and full-time professional educator status.

School districts have developed a variety of programs over the past twenty years in an effort to recruit and retain high quality teachers. The clear intent of all induction programs is to transform a student teacher into a competent career-minded teacher.

It is obvious that assistance is needed in this transformation process.

Burke and Schmidt (1984) report that "Alone in a classroom, with only trial and error as a guide, beginning teachers enter the profession of teaching with a hope and a prayer." We are convinced that teachers need more than "a hope and a prayer."

The literature often suggests that a substantial amount of learning that takes place during the informal induction of a beginning teacher is learned from other teachers. The new teacher must "know that assistance is readily available if they encounter problems or unexpected difficulties." (Zaharias and Frew, 1987)

Faced with the expectation of performing as well as experienced teachers (Lortie, 1975), many new teachers feel that any request for assistance would be interpreted as a sign of incompetence. A clinical supervisor anticipates many concerns and is willing to assist the novice in solving the problem.

Johnston and James (1986), believe that beginning teacher induction programs have great potential. They point out the use of experienced educators in guiding relatively inexperienced teachers is of value not only to the first-year teacher, but also to the clinical supervisor.

This notion is supported by a survey of past clinical supervisors in a variety of induction programs. They viewed the experience as positive, supportive and intellectually stimulating. Clinicals reported being more satisfied with their career and had a greater sense of accomplishment.

A survey of 1,074 teachers (Wagner, 1989) revealed that teachers who had mentored a new teacher were significantly more satisfied with their job than those who had never mentored a beginning teacher. In the same study, Wagner also found teachers who were mentored by experienced teachers reported substantially more satisfaction with their teaching career than those teachers who never had a mentor.

The Rochester Public Schools (Rochester, MN) and Winona State University (Winona, MN) formed a partnership in 1986 which was designed to provide a formalized mentoring induction program for 18 graduate students in their first year of teaching. The program is known as the Winona State University-Rochester Public Schools Graduate Induction Program.

Rochester Public Schools provides teaching assignments for 18 graduate fellows from Winona State University. Each of the fellows is a four-year graduate of a university/college and is licensed to teach in Minnesota. The fellows apply to the program through WSU and are selected following a team interview process. Each of the fellows is assigned to an elementary classroom, just as any other new teacher would be placed.

Rochester Public Schools pays Winona State University for the services of the fellows, who in turn are compensated by WSU. Rochester Public Schools finances the program with funds from 18 teaching positions that became available through attrition.

Six of those positions are reserved for teachers within the district to apply for jobs as "clinical supervisors" in the program. Five other positions are reserved for teachers within the district to apply for jobs as "implementation associates." The remaining seven positions provide the funding for WSU and the graduate fellows.

Thus, for the cost of eleven teaching positions, the school district receives 18 licensed teaching fellows from the university. The school district also has the opportunity to provide eleven master-level teachers from the district with renewal opportunities as "clinical supervisors" and implementation associates."

The clinical supervisors in the program provide supervision to the fellows and act as peer coaches. They consult, demonstrate teach, give instructional feedback, and emotional support throughout the fellows' first year of teaching.

They also provide similar supervision to all first-year teachers employed by the district.

The implementation associates provide in-service training to the graduate fellows and work with other district staff in curriculum planning, development, implementation, and evaluation.

Both clinical supervisors implementation associates serve for two years. The positions are thought of as a renewal opportunity for high-quality teachers throughout the district. Each of the supervisors and associates also receives 30 quarter hours of tuition waivers for graduate credit from WSU and a $1,200 stipend from the district for this commitment.

The program is managed jointly between the school district and the university. A district and university staff member share in the coordinating responsibilities. Graduate fellows and clinical supervisors are supervised by the university coordinator while implementation associates are supervised by the district coordinator.

Thus far, the program has been quite successful in attracting extremely talented applicants for the graduate fellow positions. The school district has employed many of the fellows following their experience, even though there is no obligation to do so.

Fellows who have been employed by the district appear to be quality teachers with a very good grounding in district operations and expectations. They have demonstrated competence in their ability to develop an effective lesson design and in their use of effective teaching skills and strategies.

The clinical supervisor and implementation associate positions have provided a unique opportunity for master-level teachers to leave the classroom for a two-year period and participate in a helping manner to first-year inductees. They have also experienced a great deal of personal renewal in the process.

Their participation in university classes, workshops, and seminars has enabled them to learn the most contemporary information relating to teaching, learning, and curriculum. The program has energized the participating staff and has had a positive influence on other staff members throughout the district.

The relationship between the school district and university has been positive. A steering committee comprised of staff from both institutions serve as an important link in the planning and evaluation of the partnership. Each year, the group provides the university president and district superintendent with a recommendation for the following year's program. The group operates from a consensus model and has had no major issues that have gone unresolved.

The school district and university appear to be in agreement that the program should continue. In the future, the school district would like to consider expanding the program to include secondary teaching positions. This possibility appears difficult to implement due to the subject-matter specialization of secondary teachers. It is believed recruitment of secondary teachers for specific positions would be difficult.

The Winona State University-Rochester Public Schools Graduate Induction Program provides a unique induction opportunity to 18 first-year teachers, provides a renewal experience to eleven district teachers and continues to be self-funding.

Like other professions, the teaching profession should invest the time necessary to induct recently graduated teachers in a manner to ensure success throughout their careers. So often, the first year's experience establishes the pattern for a teacher's entire career.

While much has been learned from our experience with the Graduate Induction Program, there is a need for more research and application. Very few programs of this nature exist in the United State. Local education agencies need assistance and support in developing and implementing programs designed to improve teacher training and retain quality professionals in the teaching ranks.

We strongly support Federal Legislation which provides financial assistance for teacher recruitment and training as specified in The Excellence in Teaching Act (S.1675) and The National Teacher Act of 1989 (S.1676).

GRADUATE INDUCTION PROGRAM

"Developing Quality Educators Through a Collaborative Effort of Growth and Renewal"

Winona
State
University

Dr. Darrell W. Krueger
President

and

Rochester
Public
Schools

Dr. Vernon L. Johnson
Superintendent of Schools

Dr. Lora Knutson, WSU Coordinator
Winona State University
WSU-Rochester Center
859 - 30th Avenue S.E.
Rochester, MN 55904

(507) 287-2194 (Rochester)
OR
(507) 285-7189 (Rochester)

Christopher Wagner, 535 Coordinator
Independent School District 535
Educational Service Center
334 - 16th Street S.E.
Rochester, MN 55904

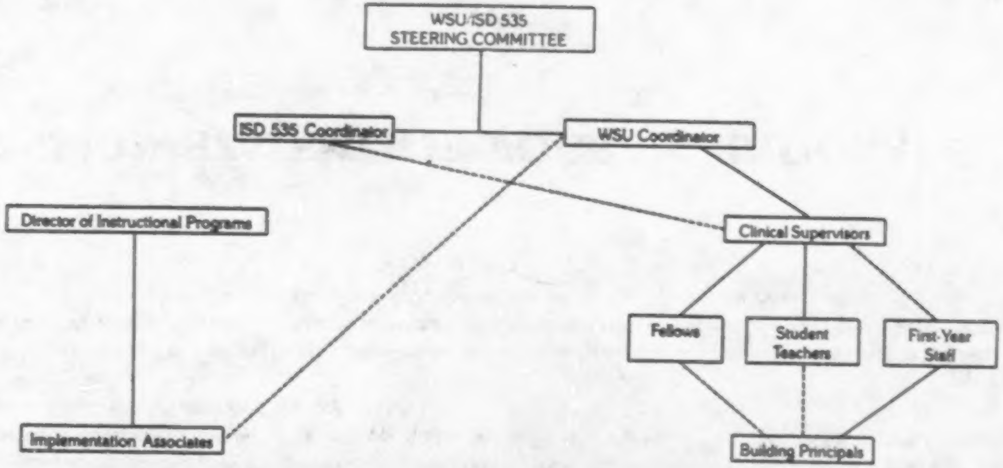
(507) 285-8558

Applications for Fellows send to:

Dr. Lora Knutson
WSU Program Coordinator
Graduate Induction Program
Educational Service Center
334 - 16th Street S.E.
Rochester, MN 55904

STEERING COMMITTEE

Wayne Erickson
Chairperson, Education Department
Winona State University
Otto Frank
Interim Dean, College of Education
Winona State University
Robert Funk
Elementary Principal
Rochester Public Schools
Diane Ilstrup
Secondary Principal
Rochester Public Schools
Nancy Johnson
Elementary Teacher
Rochester Public Schools
Lora Knutson
WSU Program Coordinator
Winona State University
Thomas Metzroth
President
Rochester Education Association
Ronald Paukert
Elementary Teacher
Rochester Public Schools
Barbara Peck
Elementary Teacher
Rochester Public Schools
George Snyder
Associate Superintendent
Rochester Public Schools
Eileen Van Wie
Associate Professor
Winona State University
Christopher Wagner
Rochester Program Coordinator
Rochester Public Schools


WSU/ISD 535
STEERING COMMITTEE
ISD 535 Coordinator
WSU Coordinator
Director of Instructional Programs
Clinical Supervisors
Fellows
Student Teachers
First-Year Staff
Implementation Associates
Building Principals

ORGANIZATIONAL STRUCTURE

"I wouldn't have wanted to complete my first year of teaching any other way. This program has given me the support and encouragement I needed to become the best teacher I can be. It's wonderful."

Jodi Haeuser
Fellow, 1988-89

"It is an honor to be on the cutting edge of this high quality induction program. I have been given an opportunity to positively affect the children in many present and future classrooms. The observations, skill building, and personal growth will be invaluable as I continue my career in education."

Dave Bailey
Clinical Supervisor, 1987-89

MISSION STATEMENT/PROGRAM RATIONALE

"Developing Quality Educators Through a Collaborative Effort of Growth and Renewal"

RATIONALE: The Winona State University (WSU) and Independent School District 535 are joint participants in a Graduate Induction Program at the elementary level in the Rochester Public Schools.

The program is designed to assist inexperienced teachers (fellows) with challenges unique to entry into the profession of elementary education. Fellows will have an opportunity to complete a Master of Science in Education through a sequence of course work and field components.

Central to program efforts is the exchange of services made possible by placing fifteen fully licensed fellows in ISD 535 elementary classrooms. This releases nine selected classroom teachers to work full-time as either clinical supervisors involved in clinical support roles or as implementation associates involved in curriculum related work.

MISSION STATEMENT/PROGRAM RATIONALE

"The Graduate Induction Program is a great opportunity to grow as a professional. It offers the advice of an experienced teacher, an incredible support system for that first year, and a huge reservoir of ideas and suggestions. Nowhere else are there as many caring people dedicated to helping you become the best you can be."

Gloria Obermeyer
Fellow, 1988-89

"The Graduate Inducation Program is a team approach in becoming more effective teachers through curriculum studies, methodology, teaching strategy sessions, and using feedback to set goals for improving our teaching effectiveness."

Marc Wing
Clinical Supervisor
1988-90

"As a Curriculum Associate, the Graduate Induction Program has meant a chance to extend and develop my professional growth. It has given me time to explore new methods and strategies for teaching as well as using my experience to help administration, colleagues, and students within the District to strive for better learning experiences for all."

Corrine Melvin
Curriculum Associate, 1986-88

GRADUATE INDUCTION PROGRAM GOALS

FELLOWS

1. To provide a planned first-year teaching experience that makes possible a broad variety of professional learning experiences.
2. To reach a level of professional skill and judgment that characterizes a well-qualified career teacher.
3. To raise professional competency to a level distinctly above that of the beginning teacher holding a bachelor's degree.
4. To re-examine and experience numerous teaching techniques and instructional strategies.
5. To synthesize various learning theories and to study their application to different types of teaching and learning situations.
6. To develop an individual teaching style based on broad observation, discussion, and consultation.
7. To increase the retention of promising beginning teachers during the induction years.
8. To maintain an environment that encourages and supports future development of leadership in the profession.
9. To have fellows successfully complete a Master's of Science Program.

CLINICAL SUPERVISORS and IMPLEMENTATION ASSOCIATES

1. To provide a renewal growth experience for master teachers.
2. To develop areas of expertise for staff development.
3. To develop skills to serve as resource and support persons to classroom teachers.
4. To further professional growth of colleagues upon returning to the teaching position.

ADMINISTRATIVE GOALS

1. To continue the designing and planning of an effective cooperative program.
2. To evaluate the program.
3. To solve problems connected with the program.

"The Graduate Induction Program provided me with the best professional development a beginning teacher could receive. The constant, real-life classroom application not only sharpened my skills, but also gave me the confidence to succeed as a new teacher."
Ramona Back
Fellow, 1987-88

"Serving as a Clinical Supervisor has rekindled my enthusiasm for being an educator, in that many of the skills I incorporated in my classroom at an unconscious level have been raised to a conscious level. Working with young, enthusiastic, new teachers and a variety of skilled veterans has provided an opportunity to reexamine the educational process and strengthen my own teaching skills."
Don Week
Clinical Supervisor, 1988-90

"The Graduate Induction Program is an exciting opportunity for ongoing learning. I'm delighted about the many new things I'll have to offer to students when I return to the classroom."
Gerri Ferdinande
Curriculum Associate, 1988-90

"The Graduate Induction Program enabled me to step back and take a broader look at what effective teaching is. Through observations, demonstration teaching, sharing ideas with others, attending seminars and conventions, and reading journals, I gained valuable understanding of the teaching process."
Charlie Healy
Clinical Supervisor, 1986-87

WSU/ISD 535 GRADUATE FELLOW INDUCTION PROGRAM

Application Procedures/Requirements

1. Complete undergraduate degree by June 1 before practicum begins.
2. Have a minimum cumulative GPA of 2.5.
3. Be eligible for appropriate Minnesota licensure.
4. Provide official transcript/completed placement file.
5. Attach letter of application to application form.
6. Complete application form (April deadline).
7. Be available for Summer Sessions I and II immediately preceding and following the yearlong teaching practicum.
8. Take Graduate Record Exam prior to completing 16 quarter hours of credit.
9. Once selected as a Fellow, formally apply for admission to WSU graduate study and pay $10.00 application fee.
10. Once selected as a Fellow, provide verification of a physical examination within the past year.

Formal Course Work

Ed. 500 Curriculum Planning -	3
Ed. 508 Improvement of Instruction -	3
Ed. 512 Adv. Meth. in Elem. Lang. Arts -	3
Ed. 513 Adv. Meth. in Elem. Soc. Stud. -	3
Ed. 514 Adv. Meth. in Elem. Science -	3
Ed. 515 Adv. Meth. in Elem. Mathematics -	3
Ed. 523 Foundations of Education -	3
Ed. 540 Current Educational Issues -	3
Ed. 570 Research in Writing -	3
Ed. 581 Trends in Measure. and Report. -	3
Credits	30

Practicums/Seminars/ Induction Orientation

Ed. 550	Induction Orientation -	3
Ed. 551	Practicums -	12
Ed. 598	Seminars -	3
	Credits	18

SUMMARY:	PROGRAM	TAUGHT AT:	CREDITS
	Core	WSU	21
	Evening Courses	Rochester	9
	Practicums/Seminars	Rochester	15
	Induction Orientation	Rochester	3
			48

The Master of Science Degree in Elementary Education is completed by the fellows attending the two summer sessions prior to the practicum, three quarters during the practicum, and the two summer sessions immediately following the practicum.

GRADUATE INDUCTION PROGRAM COMPONENTS

"The Graduate Induction Program is a great opportunity for professional growth for the Graduate Fellows and myself. I am able to spend time weekly sharing targeted observational feedback with my Fellows. This gathering of specific data requested by the Fellows on lesson design, classroom techniques, and individual children allows the new teacher to achieve optimum growth during their first year in the classroom."

Linda Nelson
Clinical Supervisor, 1987-89

"The Graduate Induction Program has offered me the support I feel every new teacher needs. The supervisors, classes, and seminars have all played a part in a challenging and enriching year of professional growth."

Barbara Smith
Fellow, 1988-89

"The Graduate Induction Program is a wonderful way to get to know the scope and sequence of our curriculum. It allows us more time for study, reading, and helping others."

Carol Schroedel
Curriculum Associate, 1987-88

GRADUATE FELLOWS	Each graduate fellow assumes full responsibility for an elementary classroom, as would any other beginning teacher. All fellows have completed Minnesota licensure requirements. The Graduate Induction Program gives them graduate credit for one year of teaching experience; they receive a fellowship and tuition waivers for credits leading to a Master of Science in Education.
CLINICAL SUPERVISORS	The Graduate Induction Program is enhanced by the selection of veteran teachers to be the clinical supervisors for the graduate fellows. The clinical supervisors coach fellows in self-identified areas of growth, using collected data in a non-evaluative approach. Their responsibilities include consultations, demonstration teaching, instructional feedback, and emotional support. Clinical supervisors serve as members of the WSU team of supervisors and as liaisons between fellows, school principals, program coordinators and WSU faculty. They also supervise new teachers and student teachers in the Rochester Public Schools.
IMPLEMENTATION ASSOCIATES	Implementation associates assist instructional staff from the Rochester Public Schools in their work at implementing outcome-based education. Their responsibilities involve curriculum planning, development, implementation, and evaluation.

GRADUATE FELLOW — CLINICAL SUPERVISOR IMPLEMENTATION ASSOCIATE

"The Graduate Induction Program provided me with the support and preparation I would have needed as any first year teacher. The benefits of earning a Master's degree and having a positive and successful first year of teaching are two accomplishments I will always have and benefit from."

Kim Benda
Fellow, 1988-89

"It's exciting to be part of an innovative program to help new teachers reach goals in their chosen profession. My reward is to be working with the enthusiasm and excitement of a first-year teacher."

Larry Rouhoff
Clinical Supervisor, 1987-89

"The Graduate Induction Program was a unique experience in professional growth. It was an opportunity to refocus, to share, and to learn more about the elements that contribute to success in the teaching process."

Jerry Mensink
Clinical Supervisor, 1986-87

PROGRAM BENEFITS

Independent School District 535:

- Peer coaching for new staff
- Curriculum development
- Classroom resource/support
- Additional professional training
  - WSU graduate program workshops/conventions
- Trainers for staff development
- Screening device for quality new staff
- Expertise of university staff
- Renewal programs for veteran teachers
- Tuition waiver for clinical supervisors/implementation associates

Winona State University:

- Expanded and unique graduate program
- Expertise of school district personnal
- Supervision of student teachers
- Expanded and unique practicum for future educators

Graduate Fellows:

- Advanced degree
- Extended practicum
- Quality guidance and support
- Stipend and tuition waiver
- Practical teaching techniques and strategies with feedback of application

Classroom Students:

- Pro-active teacher
- Experiences with "skills of independence"
- Experiences with potential master teachers
- Exposure to a variety of teaching methods

PROGRAM BENEFITS

"The Graduate Induction Program meant a start in my teaching career with tremendous support and training. The relationship that exists between Supervisors and Fellows and between Fellows and Fellows is a unique experience that would have, otherwise, been unavailable to my first year."

Don Nelson
Fellow, 1987-88

"It was a golden opportunity in which to learn, to assist, to teach, and to grow in a most unique way."

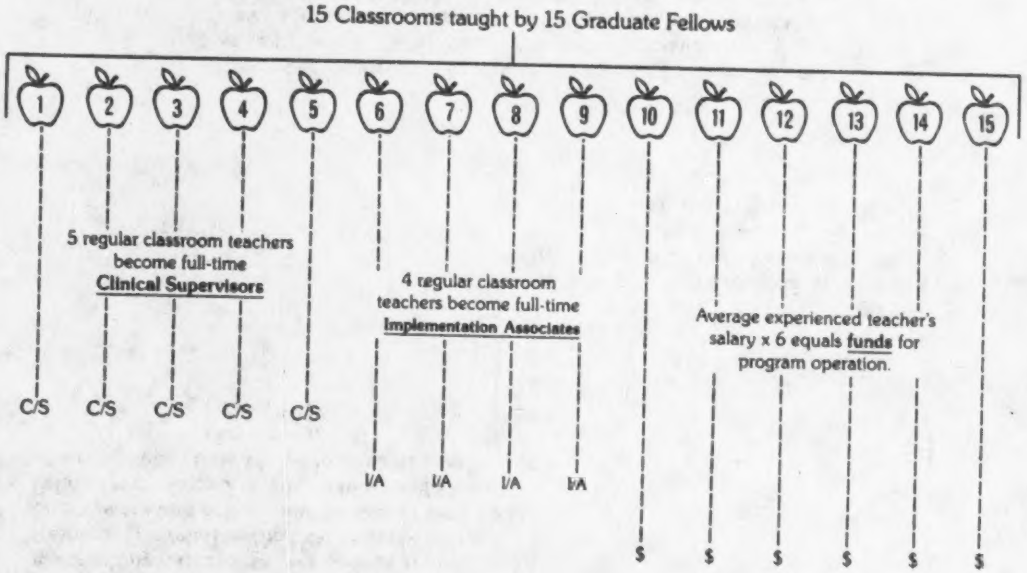
Joyce Talen
Curriculum Associate, 1986-88

"It meant an opportunity to explore my philosophy of education. It was a period of time to observe all facets of growth in young persons, experienced teachers, and other colleagues in education. I believe that today I'm a better teacher having had that experience."

Phyllis Dailey
Clinical Supervisor, 1986-87

REALLOCATION OF PERSONNEL AND MONIES

Central to the program operation is the exchange of services made possible by the *unique restructuring* of university and school district personnel and monies. This program is *sustained through* reallocation of current resources (dollars/staff) and is *not dependent* upon outside funding or additional district funding.


15 Classrooms taught by 15 Graduate Fellows
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
5 regular classroom teachers become full-time Clinical Supervisors
C/S
C/S
C/S
C/S
C/S
4 regular classroom teachers become full-time Implementation Associates
I/A
I/A
I/A
I/A
Average experienced teacher's salary x 6 equals funds for program operation.
$
$
$
$
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$

Other universities and school districts can implement a similar program if they are willing to work collaboratively and reallocate their resources.

PROGRAM OPERATION

March 5, 1990

The Honorable Claiborne Pell
335 Senate Russell Office Building
Washington, DC 20510-3901

Dear Senator Pell:

Thank you again for inviting NASFAA, on February 22, 1990, to testify before your Subcommittee on S.1676, the National Teacher Act.

During the hearing you inquired as to whether or not reauthorizing loan forgiveness to any Stafford Loan borrower who subsequently became a full-time teacher in an eligible Chapter 1 public or non-profit private elementary or secondary school would propose any specific administrative problems. Therefore, I wanted to take this opportunity to provide you with some additional thoughts on this issue that were not contained in my prepared statement.

First, let me note that there are a number of factors that will cause the implementation of loan forgiveness procedures to be administered differently by the Education Department for the Stafford Loan Program from those that are currently followed with the Perkins Loan Program.

In the case of the Perkins Loan Program, an eligible institution not only originates and disburses the loan to the student borrower, but then holds their note, services the account, including billing and collection, and maintains a record of all other transactions related to that borrower's account. As such, the process, with few exceptions, resides wholly within the control of the institution from which the student borrower received the loan, thus making it a very "centralized" operation.

The Stafford Loan Program, on the other hand, operates, for the most part, in a very "decentralized" process which almost assures that the actual loan record will be transferred among various parties over the life of the loan. For example, in the Stafford Loan Program, most of the lenders originate the loan, then sell the note, usually at or before repayment begins, to a secondary market. In addition, many students obtain their Stafford Loans from more than one lender. These lenders may or may not utilize the same secondary market, or one lender may keep the note and service it while another may sell it to a secondary market. The fact is, there is a greater likelihood that a student's Stafford Loans may be held by more than one entity than there is with the Perkins Loan Program. In and of itself, this more "decentralized" process should not cause a problem if the Education Department and/or the student can easily identify the holder of the loan(s) eligible for loan forgiveness. Currently, however, this is not always an easy task.

Another difference between the two programs is the fact that the Secretary pays to the holder of a Stafford Loan a special allowance on the loan. No such allowance is paid on a Perkins Loan. The question that arises, then, is when and how much special allowance should be paid on a Stafford Loan that is subject to loan forgiveness? For example, let's consider a student who graduates on June 1 of a given year, and has $5,000 outstanding in Stafford Loans and $5,000 outstanding in Perkins Loans. Six months after graduating, the borrower would begin paying back the principle and interest on the Stafford Loans to the holder of the note. Nine months after graduating, the borrower would begin paying the principle and interest on the Perkins Loan to the school which made the loan. Assume the student began teaching in an eligible Chapter 1 public elementary school in September of the year following graduation. After teaching for a complete year, the borrower would be eligible for a 15% loan forgiveness for both the Stafford and Perkins loans. Currently under the Perkins Loan Program the borrower would simply notify the school via a postponement form that he or she is teaching, and at the end of the completed school year the borrower would submit to the school his or her cancellation form showing that he or she had taught in an eligible Chapter 1 school. The school, in turn, would use the postponement to defer payments from the student borrower until the end of the teaching year. Then, upon receiving a completed loan cancellation form at the end of the school year, the institution would simply adjust the student's account by giving the borrower his 15% cancellation or "loan forgiveness." In essence, the amount of the cancellation takes the place of the payments that would have been due from the borrower had he not been teaching in a school eligible for cancellation.

If the borrower continued to teach in the following year, he would again file a postponement form and another cancellation form, thereby repeating the process. This could continue for each year of teaching service in an eligible school until all of the borrower's Perkins Loan was cancelled. If, on the other hand, at some point the borrower did not continue to teach in an eligible school, then he would have to make payments on the remaining balance of his loan just like any other borrower who was not eligible for loan cancellation.

If loan forgiveness, as proposed in S.1676 was enacted, then the student borrower would also be eligible to have a percentage of his Stafford Loan cancelled for each year of teaching service as well. Therefore, the Education Department would have to initiate a procedure and forms similar to those used with the Perkins Loan Program to implement loan forgiveness for the Stafford Loan Program. While this should not be difficult, there are two differences that would need to be addressed. First of all, as I have already noted, the Stafford Loan note is often sold by the originating lender to a secondary market on or before the loan enters repayment. Therefore, the student will have to know who holds his or her note so that he or she can send the forms necessary for "loan forgiveness" to the proper holder. Theoretically, this should not be a major problem since all borrowers are to be notified of such changes currently so that they know where to direct payments and inquiries. Part of the difficulty, however, is likely to occur when the borrower sends either a postponement or cancellation form to the "original lending source" and meanwhile they have just sold or transferred all of the borrower's records to another holder or secondary market. Again, these documents should be forwarded expeditiously to the new holder so that the borrower's account is brought up to date. But if there are delays or disruptions in the process, then the student borrower's account will not be properly credited, and inappropriate billings may occur. These can be corrected after the fact, but not before a certain amount of inconvenience occurs for all parties.

The second difference, and one that will have to be addressed, concerns the payment of the special allowance on the loan amount that is "forgiven." Under the Stafford Loan Program, the government pays the interest and special allowance to the holder of the note while the borrower is in school, and during the six months grace period. Once the loan enters repayment, however, the borrower is responsible for the principle and interest of his loan, but the government continues to pay a "special allowance" to the holder of the note on behalf of the borrower. This special allowance is calculated quarterly and paid to the holder. The policy question that must be addressed is whether or not the lender or holder of the note is eligible to receive special allowance on that note until the "cancellation" or "loan forgiveness" payment is applied to the student's account or does the special allowance cease once a postponement notification is received indicating that loan forgiveness will be forthcoming? While variations on this question could be considered, at issue is the obligation and cost to the government. I feel certain that different parties involved will have different opinions depending on how this will affect them, but it is a policy issue that should be addressed.

Needless to say, if NASFAA can be of any assistance to you or your staff in refining these provisions, I hope you will call upon me. Again, thank you for your continued support in improving our country's educational system.

Sincerely yours,

Dallas Martin

Dallas Martin
President

ADM/rct

cc: Senator Edward Kennedy
Senator Nancy Kassebaum

Honorable Clairborne Pell
Chairman
Subcommittee Education, Arts and Humanities
United State Senate
Washington, D.C. 20510

Dear Senator Pell:

I am pleased to submit testimony for the record to the Subcommittee on Education, Arts and Humanities on the Department of Defense program, New Careers in Education.

This program provides an excellent opportunity for retiring and retired military men and women to use their knowledge and skills, plus their expertise in dealing with young people, to assist the Nation in the betterment of our schools.

Sincerely,

Donald W. Jones

Donald W. Jones
Lieutenant General, USA
Deputy Assistant Secretary
(Military Manpower and Personnel Policy)

Enclosure:
As stated

February 15, 1990

Honorable Dick Cheney
Secretary
U.S. Department of Defense
Washington, D.C. 20301-1000

Dear Mr. Secretary:

Recently my staff was briefed by officials from the Departments of Education and Defense regarding an innovative program coordinated by the Department of Defense to encourage retiring military personnel to enter the teaching profession.

The Subcommittee on Education, Arts and Humanities, which I chair, is currently holding hearings on pending teacher legislation, and we would welcome any testimony you would like to provide us on these programs, and I would be pleased to include this testimony in the official hearing record.

The hearing record closes on March 2, 1990. Should you wish to submit testimony, I would appreciate receiving it by that date.

With warm regards,

Ever sincerely,

Clai Pell

Claiborne Pell
Chairman
Subcommittee on Education,
Arts and Humanities

Testimony for the Record

New Careers in Education Program
Department of Defense

On September 30, 1986, Secretary of Defense, Caspar W. Weinberger, and Secretary of Education, William J. Bennett, issued a joint statement encouraging retired and retiring military personnel to consider teaching as a new career upon retirement from active duty. Prior to issuing this statement, a Department of Defense (DoD) Department of Education (DoEd) Joint Committee on Education and Training for National Security had been reviewing ways the two Departments could assist each other in carrying out their respective missions involving education and training.

The DoD/DoEd Joint Committee developed the initiative on Second Careers in Education in response to teacher shortages. The program has since been renamed "New Careers in Education." The issue was emphasized in A Nation At Risk, 1983, and subsequently highlighted in numerous other documents. These documents pointed out the gap between the number of available teachers and the number needed for certain subjects, particularly in math and science, and encouraged the use of qualified individuals in these subject areas. The Committee reviewed the average retirement ages of military personnel and the technical and instructional career paths that so many follow. It was concluded that military personnel could be a potential resource for the Nation's education system. Senior enlisted personnel spend a good part of their careers conducting skill training for young people, and subject matter expertise in math and science is a requirement for a large number of military occupations and specialties.

The New Careers in Education Program provides information to retiring and retired military men and women. DoEd has developed a package for distribution that describes how to get information on teaching requirements in the individual states. DoD, working with the Military Services, has ensured that the installation education centers have the same information available for interested military personnel. Concurrent with the DoD/DoEd dissemination effort, the Military Services have developed teacher education programs at selected installations. In some cases, these programs are also open to civilian employees and dependents of military and civilian personnel.

The Army is conducting a pilot program at Fort Bragg, North Carolina; Fort Gordon, Georgia; and Fort Meyer, Virginia, with the National Executive Service Corps (NESC). NESC is completing work on a Carnegie Corporation grant studying possible solutions to alleviate current and future teacher shortages in the Nation's school systems. Working with local institutions, the graduate-level programs build on the students' past educational background and experience while ensuring that all state requirements for certification are met. The first pilot program at Fort Bragg produced 10 graduates, with five currently teaching in Fayetteville, North Carolina, high schools. The Superintendent of Personnel for Cumberland County is extremely pleased with the performance of these teachers. The remaining students are nearing retirement and will apply for teaching positions soon.

The Navy program is in place in Jacksonville and Pensacola, Florida; Norfolk, Virginia; San Diego, California; and Washington, D. C. Seven more installations have been identified. The program is targeted for active duty personnel within four years of retirement or veterans who have retired within the past five years. As with the Army program, Reserve personnel, civilian employees, and dependents are welcome to participate in the programs. Approximately 250 individuals are enrolled and, currently, 25 are teaching. The Air Force does not have a formal program. However, approximately 25 education centers have arrangements with higher education institutions to offer teacher education programs on Air Force installations. These programs are part of the overall DoD effort to assist military personnel in their transition into the civilian sector.

This concludes the Department of Defense testimony on our New Careers in Education Program. We appreciate the opportunity to share this information with the Subcommittee. The Department is pleased to encourage retired and retiring military personnel in their efforts to serve their communities through the educational system. We applaud your initiative in this area and will be happy to work with the Subcommittee as needed.

Senator **Pell**. The hearing is adjourned.

[Whereupon, at 12:27 p.m., the subcommittee was adjourned, subject to the call of the Chair.]

○